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Pepperdine University

Graduate School of Education and Psychology

HOW HUSBANDS CAN SUPPORT THEIR WIVES IN ACHIEVING WEIGHT MANAGEMENT GOALS: THE DEVELOPMENT OF A SELF-HELP RESOURCE

A clinical dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Psychology

by

Christi Lynn Kush

July, 2011

Barbara Ingram, Ph.D. – Dissertation Chairperson

This clinical dissertation, written by

Christi Lynn Kush

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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DEDICATION

This dissertation is dedicated to my mother, Faith Wasserkrug. Mom, you inspired me to pursue my dreams and helped me every step of the way. I wish every person could experience the love and devotion to her/his success that you have shown me. I am so very thankful.

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I want to first acknowledge the power of God in my life and throughout the dissertation process. "I can do everything through him who gives me strength" (Philippians 4:13 NIV).

Dr. Barbara Ingram, you are a gifted chairperson who had faith in me even when I did not have faith in myself. Your guidance and encouragement were pivotal to my success on this journey. Thank you for everything.

Dr. Francie Neely, you have been with me from the beginning. Thank you for teaching me to strive for excellence. Dr. Anita Bavarsky, thank you for the wealth of clinical experience on my topic that you provided and for your calming presence.

To my friends and family, I thank you for all of the years of support as I pursued my educational goals. It is wonderful to have so many people in my corner cheering me on; especially my husband, Nick, who definitely knows how to be a supportive spouse.

VITA

Christi Lynn Kush

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B.A., Psychology Magna cum laude

CLINICAL AND PROFESSIONAL EXPERIENCE

2007-2008 Toward Maximum Independence, Inc. San Diego, CA Supervisor: Rachel Herriott, M.A.

Social Work Consultant

- Case manager for developmentally disabled foster children and foster families, conducting frequent home and school visits
- Coordinated treatment teams including behavioral consultants, teachers, Regional Center social workers, and county social workers
- Completed treatment plans and quarterly reports, along with crisis intervention

2004-2005 Kaiser Permanente Psychiatry and Addiction Medicine San Diego, CA Supervisor: Ellen Quick, Ph.D.

Psychology Pre-Doctoral Internship (APA-accredited)

- Provided individual, couples, family and group counseling to adults, children, and adolescents with Kaiser Permanente health care coverage
- Completed psychological assessments with children and adults
- Rotations in addiction medicine and emergency medicine departments

2003-2004 Humanistic Foster Family Agency Supervisor: Emily Dvorak, M.A.

Moreno Valley, CA

Agency Social Worker

- Case manager for foster children including intake, weekly visits with foster parents and foster children
- Coordination of psychological services, writing quarterly reports, and treatment plan development
- Supervise visits with biological parents and crisis intervention

2002-2003 University of California, Riverside University Counseling Center Supervisor: Robert Corb, Ph.D.

Riverside, CA

Clinical Practicum

- Provided crisis intervention, psychological assessment, individual, couples, and group counseling for culturally diverse university student population
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2001- 2002 San Bernardino County Department of Behavioral Health Rialto, CA Supervisor: Glenn Heinrichs, Ph.D.

Clinical Practicum

- Provided assessment, crisis intervention, individual, and group therapy for chronically mentally ill outpatient and day-treatment clients
- Consulted with treatment team to formulate treatment plans

2001 Social Work Services
Supervisor: Tina Cota, M.S.W.

West Covina, CA

Case Manager with Refugio Para Ninos Foster Family Agency

- Provided crisis intervention for foster parents and foster children
- Formulated treatment plans
- Collaborated with community service providers to facilitate healthy child development and treatment of psychological issues.
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2000 - 2001 Pepperdine Public School Counseling Project Covina, CA Supervisor: Aaron Aviera, Ph.D. and Susan Himelstein, Ph.D.

Clinical Practicum

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- Consulted with teachers and staff and collaborated with various school service providers and community agencies

2000 Social Work Services

Moreno Valley, CA

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Case Manager with International Foster Family Agency

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- Formulated treatment plans
- Collaborated with community service providers to facilitate healthy child development and treatment of psychological issues
- Prepared quarterly assessment reports for county social services agencies

1999-2000

San Martin DePorres Counseling Center Supervisor: Aline Smith, Ph.D.

Los Angeles, CA

Marriage and Family Therapist Trainee/Practicum

- Internship counseling primarily high-risk youth and their families including first time offenders and school district referrals for problems such as substance abuse and conduct issues
- Provided on-site crisis intervention and individual counseling for children in grades K-8 referred by teachers, parents, and selfreferral

1999 Valley-Wide Recreation & Park District Outreach Service San Jacinto, CA Supervisor: Gayle Hepner

Summer Youth Employment Training Program Coordinator

- Responsible for program consisting of 30 teens assigned to job sites and remediation, three staff members handling case management and remediation, and 10 job site supervisors
- Activities included accountability to grant provider, human resources functions, problem resolution, and individual case management for ten students

1998 Valley-Wide Recreation & Park District Outreach Service San Jacinto, CA Supervisor: Joe Aragon, C.A.D.A.C.

Summer Youth Employment Training Case Manager

- Responsible for 20 students assigned to job sites and remediation with the primary goal being a return to school or full-time employment at the end of summer
- Activities included interaction with job site supervisors, helping students resolve problems with transportation, finances, food and clothing, and counseling as needed

1997-1998 Valley-Wide Recreation & Park District Outreach Service San Jacinto, CA Supervisor: Gayle Hepner

Pregnancy Prevention Program Group Facilitator

- Met twice weekly with Monte Vista Middle School students
- Activities included small group facilitating and individual counseling for high-risk students

1997 Valley-Wide Recreation & Park District Outreach Service San Jacinto, CA Supervisor: Emily Quast, B.A.

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- Responsible for 10 students assigned to job sites and remediation
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RESEARCH EXPERIENCE

1996-1997 University of California, Riverside Riverside, CA Supervisor and Principal Investigator: Lawrence D Rosenblum, Ph.D.

Research Assistant

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ABSTRACT

The nationwide prevalence of obesity calls for more effective strategies for weight loss and maintenance of desired weight. The majority of weight loss programs focus on behavior change (diet and exercise) with some success, although lost weight is often regained. Interventions that boost the long-term effects of weight loss achievements are greatly needed. Marriage provides an ideal context for the lifestyle changes required for effective weight maintenance. Although well-intentioned, spouses may not know how to support their partner's weight loss efforts. Because women are more likely than men to attend to their spouses' health needs and women struggle more than men to maintain a healthy weight, there is a need for a resource to help husbands support their wives in achieving weight management goals.

The purpose of this dissertation is to develop a resource to provide husbands with guidelines for supporting their wives' weight loss and weight maintenance goals. The dissertation reviews relevant studies on successful weight loss, weight loss maintenance, social support for weight loss, marriage and health, spouse-involved weight loss interventions, gender and communication, and relevant marriage and family systems literature, as well as popular sources such as self-help books, Internet websites, newspapers, and magazines.

The material was evaluated and synthesized to create the resource booklet *My Wife Wants to Lose Weight: How Can I Help?* The booklet contains information about weight gain, weight loss, and spousal support along with prescribed activities, sample scripts, and assessment tools, forming an easy-to-use guide for husbands that may make the difference in their wives' success in losing and maintaining weight loss.

Formal evaluation of the resource booklet is needed, including a study to determine its effectiveness in improving weight loss and long-term maintenance of weight loss for wives whose husbands use the resource.

Chapter I. Introduction

As anyone who has tried is well aware, losing weight is difficult; maintaining the new weight is even more challenging. Effective interventions that will insure both weight loss and new weight maintenance exist, but most of them focus on the individual, missing the opportunity to involve a powerful source of support: the spouse. Overlooking a spouse ignores the effect of marriage on those trying to control their weight.

Marriage joins two lives within a suitable context for the long-term lifestyle change necessary for successful weight loss maintenance over time. This dissertation developed a resource booklet for husbands, providing guidelines so that they can support their wives in achieving weight management goals. There are several reasons for providing this resource for husbands: women, especially older women, have more difficulties losing weight and maintaining healthy weight than men (Miller-Kovach, 2007); women outnumber men in surveys of people reporting that they are attempting to lose weight (Jeffery, Adlis, & Forster, 1991; Miller-Kovach, 2007); and because of gender role socialization, men are not as prepared as women to provide support and concrete assistance in meal planning and preparation. An important note: Although this dissertation focuses on marriage and uses the terms husbands and wives, the resulting booklet may be as useful for any partners living in a long-term committed relationship.

Background

Obesity is a problem of epidemic proportions, leading to chronic illness, disability, and premature death at a tremendous cost to both the individual and to society. Both *obesity*, defined as a Body Mass Index (BMI) equal to or greater than 30, and being *overweight* (BMI 25.0 to 29.9) are risk factors for major illnesses that are responsible for

a large percentage of deaths each year and over 70% of health care expenditures (Centers for Disease Control and Prevention [CDC], 2008a). Being obese or overweight can contribute to multiple diseases and adverse health conditions, including high blood pressure, coronary heart disease, stroke, arthritis-related disabilities, and type II diabetes (CDC, 2008d). Furthermore, diabetes alone contributes to heart disease, kidney disease, high blood pressure, amputations, stroke, and blindness. Heart disease, kidney disease and stroke can cause death. A healthy body weight is important for both the prevention of illness and prolonging life.

The formula for weight loss is simple to explain, but extremely difficult to follow: "Overweight and obesity result from an imbalance involving excessive calorie consumption and/or inadequate physical activity" (Office of the Surgeon General, 2008, para. 1). People eat more calories than they burn off and the excess calories are stored throughout their body as fat. In the United States there are four risk factors that directly impact the prevalence and severity of chronic illnesses, as well as their prevention: unhealthy diet (what is eaten and how much), physical inactivity, tobacco use, and harmful use of alcohol (World Health Organization, 2009). Two of these risk factors pertain to eating and exercise, the behaviors that determine weight.

Losing weight and maintaining weight loss are among the biggest challenges of our time. Despite awareness of the health risks of being overweight and the plethora of options and money spent on weight loss methods, many Americans are getting fatter instead of thinner (CDC, 2007b; French, Story & Jeffery, 2001). The number of overweight and obese adults has increased dramatically in the past 20 years (CDC, 2007a). According to the Centers for Disease Control and Prevention, 68% of American

adults (age 20 and older) are overweight or obese (CDC, 2007a): 34% of American adults are obese and another 34% of American adults are overweight. Less than one third of American adults are within a healthy weight range. Since the 1970s the number of children who are overweight has doubled. Overweight children are likely to become overweight adults and therefore are at greater risk for disease later in life (CDC, 2008c).

On a societal level, Americans have seen many changes over the last hundred years that have affected people's cumulative weight (Anonymous, 2001; Blair, 2003; Tillotson, 2004). Today, the United States of America is the land of plenty or, some might say, the land of too much. We consume massive quantities of everything. We eat large amounts of processed foods, which are often calorie dense and lacking in nutrients (CDC, 2008b). Prior to the Industrial Revolution our society was based on manual labor: People's daily work involved burning many calories with the hope that their hard work would produce enough food to fill their bellies. Today, most jobs no longer require much physical activity, leaving people with excess calories in their bodies that end up being stored as fat.

A large percentage of people seek to lose this excess weight. In their study of 2,107 men and 2,540 women in the upper Midwest of the United States, Jeffery et al. (1991) found that three quarters of women and nearly half of men reported that they had attempted to lose weight through dieting at some point in their lives. The CDC conducted a national survey of adults between 2005 and 2006 and found that 47.1% of the people surveyed reported attempting to lose weight within the past year (CDC, 2008e).

Sensing both a real need and a huge business opportunity, the weight loss/physical fitness industry has emerged. Over \$30 billion per year are spent on weight

loss products and services (Blackburn, 2002). There are some companies that focus on weight loss through reducing calorie consumption and/or increasing energy expenditure; however, there are many more companies/products that promise unrealistic results through ludicrous methods. It is rare to view any form of media and not see an advertisement or news segment for some new way to lose weight. A Google search of the term *lose weight* produced over 25 million results in less than 0.2 seconds. Everything can be found, including weight loss programs such as Jenny Craig and Weight Watchers, diet pills and liquids, eating plans from The Cabbage Soup Diet to the All You Can Eat Diet, exercise plans, 5,460 books on weight loss, 3.4 million blogs (web logs usually posted by an individual with commentary), and even subliminal messages and hypnosis. Those interested in a surgical approach can investigate bariatric surgery, either gastric bypass surgery or the Lap Band® procedure, which is a minimally invasive restrictive procedure requiring no stomach stapling or re-routing of internal organs. The U.S. Federal Trade Commission (Cleland, Gross, Koss, Daynard, & Muoio, 2002) conducted an analysis of the state of weight-loss advertising and found:

The world of weight-loss advertising is a virtual fantasy land where pounds "melt away" while "you continue to eat your favorite foods"; "amazing pills . . . seek and destroy enemy fat"; researchers at a German university discover the "amazing weight loss properties" of asparagus; and the weight-loss efficacy of another product is comparable to "running a 20 mile marathon while you sleep." It's a world where, in spite of prevailing scientific opinion, no sacrifice is required to lose weight ("You don't change your eating habits and still lose weight"). Quick results are the (promised) norm ("The diet works three times faster than

FASTING itself!"). You can learn how to lose weight with "No exercise. No drugs. No pills. And eat as much as you want – the more you eat, the more you lose." There is no need to worry because the products are "safe," "risk free," and/or "natural," and some marketers are so concerned for your safety that they warn you to cut back if you lose too much weight ("If you begin to lose weight too quickly, take a few days off!!!"). You can always get your money back because so many of these "amazing" products are "guaranteed" (". . .we'll give you your money back. Straight away. No questions asked"). (p. 5-6)

The promises of advertisement fall short of the reality of successful weight loss. For healthy, long-lasting weight loss, a goal of one to two pounds per week is realistic (Mayo Clinic Staff, 2009). Foreyt and Goodrick (1993) compared results from comprehensive reviews of behavioral weight loss programs and found that the loss of 21.8 pounds in 18 weeks (approximately 1.1 pounds per week) was average. Advertisements for commercial weight loss products and programs are often misleading, with "not typical results" in tiny print accompanying pictures of dramatic before-and-after changes. Significant short-term weight loss is possible, but often it cannot be sustained over extended periods of time. Tabloid magazines often print pictures of celebrities who have lost weight, but the biggest headlines seem to be reserved for those who have gained back weight previously lost.

Weight loss maintenance is more of a challenge than initial weight loss. The Consumer Reports (2009) survey of the magazine's subscribers found that 42% of respondents described themselves as "failed dieters": people who said they would like to slim down, yet still weighed at or near their lifetime high (p. 2). The scholarly literature

confirms what we know from the popular media: when people do succeed at losing weight, there is a very small probability of their keeping that weight off for more than a year (Foreyt & Goodrick, 1993; Jeffery et al., 2000). According to Wing and Jeffery (1999), "behavioral treatment programs [that focus on the energy balance formula] have become increasingly effective in producing initial weight loss, but long-term maintenance remains more problematic" (p. 132).

It is difficult to determine the exact percentages of individuals who maintain weight loss because of differences in how initial and long-term success is measured, but researchers have found that people frequently re-gain weight they lost through behavioral intervention (Jeffery et al., 2000). According to a 2006 study reported in *The New England Journal of Medicine*, most people who participate in weight-loss programs "regain about one third of the weight lost during the next year and are typically back to baseline in three to five years" (Wing, Tate, Gorin, Raynor & Fava, 2006, p. 1564).

The process of losing weight through dieting, regaining weight, and then losing it again is called *yo-yo dieting* or *weight cycling* (Jeffery, 1996). There are biological factors that encourage weight re-gain. When a person loses weight, the fullness hormone, leptin, decreases and the hunger hormone, ghrelin, increases (Hellmich, 2009). The human body reacts to weight loss by encouraging eating to prevent starvation, even if the person is overweight and not at risk of starvation. Another contributor to weight cycling is short-term dieting that does not include long-term lifestyle change. Once a person who has lost weight returns to their previous eating and exercise patterns, they usually regain the weight that was lost. Researchers have found that over time, women who weight cycle tend to gain more weight than women who do not weight cycle (Weight-control

Information Network, 2011b). However, metabolic rate does not appear to be affected by weight cycling (Weight-control Information Network, 2011b). Some research has shown that weight cycling can increase total and cardiovascular mortality; however, methodological limitations leave the results less than definitive (Jeffery, 1996). Along with the possibility of physical consequences of weight cycling, there are psychological effects (Hellmich, 2009). Regaining weight after being so proud of losing it in the first place can lead someone to feel ashamed and humiliated, and it can make them want to give up the weight loss battle forever.

There has been growing awareness of the shortcomings of methods of weight loss that rely solely on the individual's ability to exercise willpower, with a need to look at social and environmental factors in the cause and treatment of obesity. Bandura (1998), founder of social cognitive theory, summarized the evolution of models of health promotion and disease prevention:

We have shifted from trying to scare people into health, to rewarding them into health, to equipping them with self-regulatory skills to manage their health habits, to shoring up their habit changes with dependable social supports.... A comprehensive approach to health promotion requires changing the practices of social systems that have widespread detrimental effects on health rather than solely changing the habits of individuals. (p. 623)

Until such social change occurs, a greater emphasis on social support seems warranted.

There is substantial research evidence of the strong and positive effects of social support in health and medical issues. Participating in behavioral weight loss treatment with friends improves maintenance of weight loss over time (Wing & Jeffery, 1999).

Many people have lost weight by participating in Weight Watchers, a program that creates social support through regular meetings that combine members trying to lose weight and members who have lost weight successfully.

Any support partner can be helpful, but as one might expect, family members have an edge: "(W)hen a family is emotionally close, caring, and satisfying, supportive family relationships can make the difference between success and failure in maintaining weight loss" (Barbarin & Tirado, 1985, p. 120). Clearly, family can be a great support to individuals attempting to lose weight or maintain weight loss. Marcoux, Trenkner and Rosenstock (1990) asked a group of people who had been successful in weight loss to identify the person who was *most* helpful in their weight loss efforts, treating *spouse* and *family member* as separate categories. For the 24 women and 2 men who had participated in the study, 46% identified a family member and 27% stated a spouse was most helpful.

Yet, for better or worse, family dynamics are complex. When these same researchers asked study participants who was *least* helpful for their weight loss efforts, 42% stated that family members were least helpful and 8% identified their spouses as least helpful. Marcoux et al. (1990) found that the type of support most beneficial to weight loss was appraisal support (giving compliments about weight loss); however, they found that friends and neighbors were a better source of this support than spouses and family members. This suggests that spouses may not be giving the best types of support and need some help developing support skills. The authors of the study concluded that family members need to be trained in how to provide support for behavior change.

The desire to be supportive is not enough: Family members with good intentions to help with weight loss may lack the knowledge of how to be helpful. Individuals differ

in the kind and amount of support they desire, and what is helpful for one person may be experienced as negative by another. In order to maintain equilibrium within the family, family members may consciously or subconsciously sabotage another's efforts to reach and maintain a healthy weight. Sabotage can come in many forms, such as suggesting that a person is losing too much weight, acting insulted if a dieter refuses to eat the chocolate cake his/her loved one made for him/her, and/or leaving calorie dense foods around the house for the dieter (Lawrence, 2004). People can sabotage for many reasons, including fear that they will lose their new thinner loved one to another or because they feel bad about their own overweight status.

Because it is the spouse who is often most influential, he is the person who most needs to develop support skills. Looking beyond the issue of weight, we find that of all adult social relationships, marriage appears to be most related to health. In the early research on the relationship of marriage and health (Goodwin, Hunt, Key, & Samet, 1987; Kotler & Wingard, 1989; Verbrugge, 1979; Verbrugge, 1983), it appeared that marriage was a buffer against health problems that afflicted the unmarried. Later studies focused on the quality of marriage, recognizing that marriage could impact health for better or worse (Ren, 1997; Ross, Mirowsky, & Goldsteen, 1990; Wickrama, Lorenz, Conger, & Elder, 1997).

Marital quality has been shown to affect women's dieting behaviors. Markey, Markey, and Birch (2001), in a longitudinal study of familial health, studied both husbands and wives in an examination of self-esteem, marital quality and dieting behaviors. Healthy dieting behaviors (example: eating more fruits and vegetables) and unhealthy dieting behaviors (example: vomiting after eating and/or taking diet pills) were

assessed using the Weight Control Behaviors Scale. The researchers found that healthy dieting practices were not correlated with the quality of the marital relationship for either husbands or wives. In contrast, unhealthy dieting was associated with poor marital quality, the perception of little understanding from the spouse, lack of harmony and lack of love. Women who were less happy in their marriage were more likely to engage in unhealthy attempts to lose weight; however, none of the marital constructs predicted unhealthy dieting for husbands. The authors suggested that possibly women respond to marital disharmony in different ways than men, turning their pain inward and self-punishing through unhealthy dieting behaviors. However, the reverse is possible: the wives' unhealthy dieting behavior led to them reporting poor marital quality.

Alarming results from a recent study suggest that marriage is associated with increased weight gain, especially for women. The and Gordon-Larsen (2009) used information from a national prospective data set to compare weight gain in 6,949 single/dating, dating/cohabitating, and cohabitating/married young adults. Data regarding weight, relationship status, and duration of time living with partner, obtained in 1996 and 2001, were compared using logistical regression. Both men and women who transitioned from single/dating to cohabitating/married in between the two assessments were more likely to become obese than individuals who stayed unmarried. However, women were more greatly affected by cohabitating (married or not) than men, with women having an increased likelihood of becoming obese. The authors analyzed another subset of the data that included 1,293 dating, cohabitating, and married/cohabitating couples. Compared to non-cohabitating couples and couples who had lived together less than two years, "romantic partners who lived together ≥ 2 years were significantly more likely to consist

of one or two obese, less physically active, and more sedentary partners" (p. 1445). This important study supports the need for interventions targeting the marital unit.

It is well established that successful weight loss and maintenance of a healthy weight rely on the establishment of a lifestyle pattern of healthy eating and regular exercise (Miller-Kovach, 2007). This is where marriage may confer the most benefit; it provides both the context and the opportunity to succeed where typical time-limited weight loss programs fail - in the maintenance of healthy weight over the long term.

Most weight loss programs focus on the individual, missing the opportunity to involve a powerful source of support: the spouse. As a long-term significant relationship, marriage provides an ideal context for the lifestyle changes required for effective weight maintenance, if spouses support, rather than sabotage, each other's efforts to maintain an optimum weight. Although they may want to help, spouses may not know how to do so, and in their ignorance may make things worse.

The Need for Supportive Husbands

Women far outnumber men in weight loss programs (Miller-Kovach, 2007) and are therefore the population at greatest need for new, creative approaches to successful weight management. Furthermore, mothers typically have the greatest influence on the food consumption of children, and there is an abundance of evidence from recent research that patterns of eating in the family have an impact on the obesity of children and adolescents (Diamant, Babey, Jones, & Brown, 2009; Heinberg & Thompson, 2009; Pearson, Biddle, & Gorely, 2009). This impact may affect the health habits and obesity levels of generations to come.

Women have more difficulty losing weight and maintaining a healthy weight than men (Miller-Kovach, 2007). Some of the reasons for this discrepancy come from biological factors. Men carry more lean muscle mass than women, which causes men to burn more calories. Women also face hormonal shifts during their lifetimes that affect their weight (Miller-Kovach, 2007). Pregnancy causes weight gain that typically does not disappear with the birth of the child. While breastfeeding is encouraged not only for the health of the child but also for its help with losing pregnancy weight, a woman must eat additional food to produce sufficient supply of milk. Menopause, another hormonal shift, occurs later in life and is often accompanied by weight gain of five to seven pounds or more.

Another source of married women's difficulties with weight management is that, despite changes in women's roles in recent decades, they still take on the task of feeding the family (Beverly, Miller and Wray, 2008) and cannot use the strategy of keeping the cupboard bare. As meal providers, women feel obligated to attend to the special food needs and preferences of their family members. For instance, if the husband needs help in improving his diet, he can count on his wife to tailor her meal planning and food preparation to meet his needs. If a wife and mother wants to limit her own selection of foods, she will face the challenge of watching her husband and children eat unrestricted types and quantities of food. Faced with the burden of preparing multiple menus, she may just find it easier to eat what the rest of the family eats. If she is advised to put the whole family on her eating program, she may define that choice as *selfish* and feel guilty over putting her needs first. Weight loss literature and programs for women try to frame modification of eating patterns as *self-care* rather than deprivation or punishment;

without the husband's support and participation, such self-care may not be an acceptable choice.

Men need help in learning how to provide support for their wives because many do not learn how to be nurturing as children. Extensive research on gender differences in childhood has shown that girls are more likely to engage in nurturing play (Shaffer, 1994). At one time gender differences in play were primarily thought to be a function of socialization; however, more recent research has found gender differences in preferences for dolls as early as three to eight months of age (Alexander, Wilcox, & Woods, 2009). Socialization reinforces the differences inherent at birth. While women more than men are socialized to be nurturing and to care for others (Umberson, 1992), men are typically socialized (and have the hormonal predisposition) to dominate and compete.

Men and women may benefit from different types of social support (Miller-Kovach, 2007). There is a natural tendency to give others the type of support that we ourselves need; because of gender differences, this means that each partner in the marriage is likely to be out of tune with the spouse's needs. Men's style of coping with problems is often referred to as *going into a cave*, whereas women typically turn to others (Gray, 1992). Therefore, when men do not get active support, they may feel relieved and respected, whereas women might feel neglected and disappointed. This expectation is supported in research. In a study of 49 obese diabetic patients and their obese spouses, women, who are more likely than men to offer social support, were the ones most likely to be affected by the presence or lack of social support (Wing, Marcus, Epstein, & Jawad, 1991).

The literature on gender communication differences as well as that for marital therapy have many examples of the different helping styles of men and women and the frustration that women feel when men tell them how to solve a problem when they want to be listened to and understood (Farrel & Farrel, 2001; Gray, 1992; Tannen, 1990). Where weight loss is concerned, men are likely to see the simple solution (eat less, move more) and then cycle through bewilderment, frustration, and anger when women complain how hard it is and fail to make progress.

Husbands can either help or hinder the wife's achievement of weight loss goals. A willing husband who wants to help may not know what to do, and his wife may not be able to explain what she needs. Although the potential for husbands to help their wives is strong, they may not automatically know what to do or say, or more important, what *not* to do or say. There is no "manual" for husbands to guide them in their efforts to be supportive. Stand-up comedians get laughs of recognition when they joke that the answer to the question; "Does this dress make me look fat?" is always an enthusiastic, fully-committed, "No." Husbands may get frustrated if the wife says she wants him to point out when she overeats and then complains that he is trying to control her when he does so.

These types of miscommunication are to be expected, according to popular books that examine the differences between the genders in styles of communication: *Men Are Like Waffles, Women Are Like Spaghetti* (Farrel & Farrel, 2001), *Men Are from Mars, Women Are from Venus* (Gray, 1992), *You Just Don't Understand* (Tannen, 1990). Take, for example, the language of weight loss: a woman described as thin may be quite

pleased, a man may think he is being called weak or wimpy (Miller-Kovach, 2007). Encouragement and compliments can be lost in translation between men and women.

There is already recognition in the popular literature that husbands need to learn more about how to help their wives lose weight. A *Google* search on March 28th, 2010, using the terms "helping wife lose weight" produced over 113,000,000 results, including two magazine articles from *Men's Health* and *Christianity Today*, a short column on the Weight Watchers site and many, many blog and forum entries. However, very few of these sources focus on providing support as defined by the wife. Eight of the first 10 Google results provided links to advice on how to *get* the wife to lose weight, not how to *support* her in losing weight. When the search words were changed to "my husband is sabotaging my weight loss" 16,700 results were listed. Nearly half of the results on the first page were women crying out for help. They wanted to know how to get their husbands to stop sabotaging their weight loss efforts: bringing home high calorie foods, making negative comments about their efforts, complaining about how their wife's dieting affects them, and/or discouraging them from losing any weight.

A preliminary search, using PsycInfo, found a limited number of articles and dissertations when the descriptor terms "weight loss" and "spouses" were combined.

Only 16 items resulted from the search. (Black & Lantz, 1984; Black & Threlfall, 1989; Buchanan, 1988; Collier, 1993; Cunningham, 1986; Ewing, 1987; Hafner, 1991; Hamilton & Zimmerman, 1985; Kagan, 1984; Klein, 1993; Murphy, 1982; O'Neil, 1979; Slusky, 1994; Weisz & Bucher, 1980; Williams, 1984; Zitter, 1980). When the descriptors *social support* or *assistance* were added, there was only one reference, a dissertation (Slusky, 1994).

From the search results listed above, only five addressed helping spouses become more supportive. Therefore, there is a need for attention to that deficiency. This dissertation is intended to fill that need by addressing the complex challenge of weight loss, and integrating the research literature on weight management as well as the perspective of the author who is trained in marriage and family therapy.

Purpose and Importance of the Dissertation

The purpose of this dissertation was to develop a resource booklet designed to provide husbands with guidelines for supporting their wives, as they attempt to achieve self-chosen weight management goals - losing weight and/or maintaining their desired weight over time. The author looked at weight loss from a systemic perspective - one that includes the spouse in the weight loss equation - in hopes of offering a new resource that can help wives both lose weight and maintain the weight lost. It was made clear in the introduction to the booklet that it is not intended to help husbands impose *their* goal of having a slimmer wife, but rather to help their wives reach their own weight loss goals.

To develop this resource, the investigator conducted an extensive review of research studies and writings on the subjects of weight management (weight loss and maintenance of desired weight), social support and weight loss, marriage and weight, involvement of spouses in weight loss intervention, relevant marriage and family therapy concepts, and gender and communication. From a preliminary examination of the literature, the author created a tentative outline of the contents of a resource booklet for husbands. A more extensive literature review followed, leading to decisions about the content of the booklet. A draft of the booklet was prepared, including realistic vignettes, sample scripts, prescribed activities, assessment tools, and a list of helpful books and

websites. The draft was reviewed by the author's committee members and informally reviewed by three couples with a wife attempting to lose weight or maintain a healthy weight.

The final version of the booklet incorporated the feedback given by the committee members and couples and presents information in an attractive, colorful format. The dissertation concludes with a discussion that includes a plan for future evaluation of the booklet.

Definitions

The following terms are used throughout this dissertation:

Dieting: *diet* defined as "a prescribed course of eating and drinking in which the amount and kind of food, as well as the times at which it is to be taken, are regulated for therapeutic purposes" (*American Heritage Medical Dictionary*, 2008, p. 153).

Weight Problems: This term refers to either obesity or being overweight. It does not refer to being underweight or being of healthy weight desiring to attain an unhealthy goal of thinness.

Weight Management Goals: This term refers to both weight loss goals and goals to maintain desired weight. It does not include goals to gain weight.

Summary

The goal of this dissertation was to develop a resource booklet for husbands who want to support their wives as they attempt to achieve and maintain their desired weight over time.

Need. There are more overweight American adults than there are American adults who are at a healthy weight. Being overweight and/or obese can have devastating

consequences for health and longevity. For the most part, weight loss programs have focused on behavioral techniques for losing weight that have not resulted in long-term healthy weight management for most of the people who have tried them. Interventions that will improve weight loss and weight loss maintenance are needed. Social support has been found to increase weight loss success and marriage provides a live-in support partner. However, spouses can only help if they know how to be supportive and not sabotage their spouses' weight loss efforts. Women, more than men, have difficulty maintaining a healthy weight. Women also tend to focus more on their husbands' health needs than men focus on their wives' health needs. Therefore, there is a need for a resource for husbands to help them learn how to support their wives' weight loss efforts.

Plan. To develop the booklet, the author examined and synthesized relevant studies found in the literature on successful weight loss and weight loss maintenance, social support and weight loss, marriage and health, weight loss interventions that include spouses, gender and communication, and marriage and family therapy literature. She reviewed scholarly articles from the fields of medicine, psychology, and marital relationships, as well as popular sources such as self-help books, Internet websites, newspapers, and magazines. The author evaluated and synthesized the material to create the resource booklet *My Wife Wants to Lose Weight: How Can I Help?* The booklet contains realistic vignettes, sample scripts, recommended activities, and a list of helpful books, websites and organizations.

Expected benefits. The booklet is a user-friendly guidebook for husbands that may increase their wives' chances of losing weight and maintaining weight loss. A healthy weight will improve overall health, leading to reduced risk for chronic disease

and a greater likelihood of a longer, more active life. Moreover, helping wives develop healthy behaviors may have an impact on preventing obesity in their children.

Discussion and conclusions. The dissertation concludes with a discussion of strengths and limitations of the resource booklet, and suggestions for more formal evaluations to guide future editions.

Chapter II. Literature Review

This literature review addresses topics needed to develop a resource booklet for husbands whose wives are attempting to lose weight or maintain weight loss. First, it is important to address the challenges to achieving weight management goals and why it is so difficult. Next, the current state of knowledge regarding best methods for achieving weight loss are reviewed. Then the significance of social support is addressed. One special category of social support is one's family, and for married people the spouse may have greater influence on one's health than does any other individual. From a broad range of literature on marriage and health, the author selected studies that are relevant to understanding how spouses can help or hinder efforts to live a healthy lifestyle. Genderbased communication, gender roles and family systems factors are included to illustrate that wives have special challenges and that husbands need to be educated on how to help. (See the Appendix for detailed information about the most relevant articles.)

Challenges to Achieving Weight Management Goals

There are many challenges to achieving and maintaining weight loss goals. People are overweight because they eat too much and/or don't exercise enough. This simplistic explanation of overweight and obesity gives the false sense that losing weight should be easy. Just eat less and move more. However, if it were that easy then the United States would not have the prevalence of obesity that it has. The fact that three quarters of women and half of men have attempted to lose weight at some point in their lifetime (Jeffery, Adlis, & Forster, 1991) suggests that individuals who are overweight or obese want to be a healthy weight. However, many obstacles stand in their way to long-term weight loss success.

One challenge to meeting weight loss goals is fad diets. Fad diets and temporary diets do not work long term (Bren, 2002). Fad diets, such as the cabbage soup diet, grapefruit diet, or No-Carb diet, typically lead to temporary weight loss because of a reduction in calories consumed. However, as the individual reintroduces a variety of foods into their diet the weight comes back. Any temporary change can produce results but the goal of weight loss is long-term maintenance.

A second obstacle to maintaining a healthy weight is the fast food industry. The popular media has publicized the damaging effects on health of the fast food industry. Books like *Fast Food Nation* (Schlosser, 2001) and movies like Morgan Spurlock's *Super Size Me* (Spurlock & Spurlock, 2003) have attempted to show consumers the negative health consequences of eating inexpensive, unhealthy fast foods. The population of the United States eats large amounts of processed foods, which are often calorie dense and lacking in nutrients (CDC, 2008b). Healthier foods are often more expensive than less healthy foods. The dollar menu at a local fast food restaurant can fill up a family for much less money than a restaurant salad bar. Inexpensive food that tempts the taste buds, located on nearly every urban corner, is a definite challenge to someone trying to lose or maintain a healthy weight.

It is not just the fast food industry that has conditioned us to expect large portions. Prepackaged snack foods and soft drinks have grown in size (National Center for Chronic Disease Prevention and Health Promotion Division of Nutrition and Physical Activity, 2006). Snack foods are packaged in a way that suggests they include a single serving but the label states that it contains multiple servings. Portion sizes of food prepared at home have increased as well (National Center for Chronic Disease Prevention and Health

Promotion Division of Nutrition and Physical Activity, 2006). American food portions in restaurants and those prepared at home dwarf food portions in Europe, where obesity is not as common (Steenhuis & Vermeer, 2009). Portion size is important because people eat more when they have more on their plate (National Center for Chronic Disease Prevention and Health Promotion Division of Nutrition and Physical Activity, 2006) and the more calories that are consumed, the more calories that need to be expended to lose weight or avoid gaining weight.

Today's more sedentary lifestyle has caused a reduction in daily calories expended and also a challenge to maintenance of a healthy weight (CDC, 2008b). Prior to the Industrial Revolution our society was based upon manual labor. A person's daily work involved burning many calories with the hope that their hard work would produce enough food to fill their bellies. Many jobs no longer require much physical activity, causing a person to burn fewer calories than they would at a physically active task (CDC, 2008b). Travel by automobile has also decreased physical activity for much of the population (CDC, 2008b). The invention of television, computers and video games has led to more time sitting and less time moving (with the exception of exercise programs now available on television and video games).

Research on Successful Long-Term Weight Loss

Despite the many challenges to weight loss, there are people who lose weight and are successful in maintaining that weight loss (National Weight Control Registry, 2008). Wing and Hill developed the National Weight Control Registry (NWCR) in 1994 to investigate characteristics of individuals who have successfully maintained weight loss for one year or longer (NWCR, 2008). Of the 5,000 individuals that the registry tracks,

the majority report maintaining a low calorie and low fat diet, along with high levels of physical activity, as their method for keeping the weight off. The lifestyle changes that long-term maintenance requires can be very difficult.

Weight loss maintenance is possible but not probable. Despite the existence of effective methods for weight loss and weight loss maintenance, the long-term success of weight loss is poor for the majority of people (Jeffery et al., 2000; Perri, 1998). When people do succeed at losing weight, there is a very small probability of their keeping that weight off for more than a year (Foreyt & Goodrick, 1993; Jeffery et al., 2000).

Exact percentages of long-term successful losers are unknown because of varied methods for measuring success; however, the trend is for individuals to regain much of the weight they lost. Losing 10% of your body weight and keeping it off for more than 18 months is considered weight loss success; however, for clinical outcome five year follow-ups are best (Jeffery et al., 2000). Jeffery et al. (2000) conducted a review of the literature on long-term maintenance of weight loss and concluded the following:

The natural history of weight loss and regain among patients participating in behavioral treatments for obesity is remarkably consistent. The rate of initial weight losses is rapid and then slowly declines. The point of maximum weight loss is usually reached approximately 6 months after the initiation of treatment. Weight regain then begins and continues gradually until weight stabilizes somewhat below baseline levels. (p. 7)

One way that behavioral treatment programs for weight loss have increased initial weight loss and improved maintenance is through extending treatment (Jeffery et al., 2000; Perri, 1998; Perri et al., 2001; Weight Loss Maintenance Collaborative Research

Group, 2008). Perri (1998) conducted a review of studies that attempted to increase long-term maintenance of weight loss and found that including extended treatment through follow-up sessions with a therapist was effective in helping to maintain weight loss, but once treatment was terminated the weight was regained. Perri stated that "a complex interaction of physiological, psychological and environmental variables appear responsible for the poor maintenance of weight loss" (p. 528). Obesity appears to be a chronic condition that requires treatment from many different angles.

Factors That Influence Weight Loss Success

Cultural and ethnic differences. Obesity is a condition that often disproportionately affects people of color. The CDC analyzed data from the Behavioral Risk Factor Surveillance System (BRFSS) national surveys conducted between 2006 and 2008 to assess statistical variation of percentages of obesity within the population (CDC, 2009). Non-Hispanic blacks had a 51% greater prevalence of obesity than non-Hispanic whites and Hispanics had a 21% greater prevalence of obesity than non-Hispanic whites. The differences were greater among women than men, with the prevalence of obesity being 39% for non-Hispanic black women, 29% for Hispanic women, and 22% for non-Hispanic white women. The CDC's report did not compare data for other racial/ethnic sample populations. The CDC found a similar trend toward obesity among children; however, the differences between the racial/ethnic groups' percentages of obesity were much smaller and not significant: non-Hispanic blacks 20%, Hispanics 19%, and non-Hispanic whites 16% (Caprio et al., 2008).

The reasons for varying rates of obesity among different racial/ethnic populations are not fully known, but many possible causes have been identified. Researchers have

observed ways that racial/ethnic populations differ in behaviors that contribute to weight gain (CDC, 2009). For example, Marshall et al. (2007) found that non-Hispanic blacks and Hispanics are more inactive during leisure time than non-Hispanic whites. Non-Hispanic blacks and Hispanics are more likely than non-Hispanic whites to live in neighborhoods with less access to healthful foods and safe areas for physical activity (CDC, 2009). Cultural standards may also play a role in obesity rates. African American women perceive the ideal body size as significantly larger than what non-Hispanic white women see as the ideal body size (Caprio et al., 2008). Individuals satisfied with their body size are not likely to attempt to lose weight and therefore may stay at an unhealthy weight. Researchers have also identified possible biological causes of the racial/ethnic discrepancies in obesity rates (Wang, You, Lenchik, & Nicklas, 2009). Black women tend to have a lower resting energy expenditure rate, the largest portion of a person's total daily energy expenditure, than white women (Wang et al., 2009). This difference may make it necessary for a black woman to burn more calories through exercise to lose the same amount of weight as a white woman. Hispanic women were not included in this study.

An important factor to consider when examining obesity statistics is whether people have attempted to lose weight and possible racial/ethnic differences in success rates. Some researchers have found no racial or ethnic differences in who is successful at weight loss (Kruger, 2009; Weight Loss Maintenance Collaborative Research Group, 2008), while others have found that African American women are less likely than white women to join a weight loss program and are less likely to successfully lose weight (Davis, Clark, Carrese, Gary, & Cooper, 2005). Davis et al. (2005) conducted focus

groups with African American and white overweight women to examine differences in their past and/or current experiences with weight loss attempts. The researchers found failure of weight loss maintenance as a theme throughout the focus groups, regardless of race of participants. All of the women had attempted to lose weight; most lost some weight but were unable to keep it off. There were, however, some themes that varied by race. African American women preferred spiritual intervention to address emotional and psychological concerns, reported family pressure to accept their weight, and stated that cultural beliefs and expectations about food complicated their ability to lose and maintain weight loss. Interestingly, when discussing weight loss methods, white women emphasized physical activity and did not discuss food characteristics such as taste and texture, while the opposite was true for African American women. People trying to lose weight, and their supporters, would most likely benefit from an awareness of how cultural traditions and expectations can complicate attempts to lose weight. Awareness can lead to discussion about how to maintain cultural connections while following a weight loss plan.

Personality differences. In an effort to discover what factors cause some people to lose weight successfully and keep it off, while others are unsuccessful despite frequent attempts, researchers have looked at personality characteristics that may play a part in this process. Shaffer (1994) reported, "When psychologists speak of 'personality,' they are referring to a broad collection of attributes—including temperament, attitudes, values, and distinctive behavioral patterns (or habits)—that seem to characterize an individual" (p. 59). Because the definition of personality is multifaceted, the research about personality factors associated with weight loss success is diverse and far from conclusive. This

author will highlight some of the personality characteristics and patterns that have been researched, while acknowledging that this is not a comprehensive review of the subject.

Many researchers have used various personality measures to investigate the connection between weight loss and personality. Sullivan, Cloninger, Pryzbeck, and Klein (2007) used the Temperament and Character Inventory (TCI) to compare obese participants in a weight loss program who were successful at losing weight (lost >10% of initial body weight) with participants who were unsuccessful (lost < 5% of initial body weight). The researchers found that successful participants scored significantly lower in novelty seeking than participants who were unsuccessful (or at least less successful). They also compared obese individuals in the community to obese individuals who enrolled in a weight loss program. The weight loss program participants scored higher in reward dependence (characterized by sensitivity to social cues, seeking of approval from others, and seeking support in decision making) and cooperativeness than nonparticipants. The authors suggested that reward-dependent individuals tend to be sociable and need social approval, characteristics that are congruent with participation in a group weight loss program.

De Panfilis et al. (2008) administered the TCI to 92 obese individuals who applied for a six month behavioral weight loss program. Thirty of the applicants dropped out of the program before the end of treatment. The researchers found that treatment attrition was predicted by low reward dependence. The findings regarding reward dependence are consistent with Sullivan et al.'s (2007) findings and suggest that a person who has difficulty relying on the support of others may have difficulty following through with a

behavioral weight loss treatment program that utilizes social support (De Panfilis et al., 2008).

De Panfilis et al. (2008) also found that the presence of mental disorders predicted a greater risk of attrition. Given the mental and physical challenge that attempting to lose weight presents, it is not surprising that the presence of mental disorders would put someone at greater risk for dropping out of a weight loss program. Elfhag, Rossner, Lindgren, Andersson, and Carlsson (2004) administered the Rorschach test to 49 obese individuals prior to participation in a six month behavioral weight loss program to identify personality characteristics associated with weight loss success. They found that perceptual and cognitive distortions (indicated by the Schizophrenia Index) predicted less weight loss. The authors suggested that these distortions did not represent severe dysfunction, yet significant enough distortions were present possibly to "disrupt the ability to adhere to the treatment, to incorporate information, and to gain from the educative approach" (p. 302). Individuals with mental disorders or perceptual and cognitive distortions might benefit from psychological/psychiatric treatment to address these issues prior to or concurrent with weight loss treatment.

Instead of investigating a broad range of personality traits that may be related to weight loss success, Benyamini and Raz (2007) focused on one trait: optimism. Ninety-five individuals (74 women and 21 men) participated in an eight week behavioral weight loss program and completed the Life Orientation Test-Revised to assess dispositional optimism. Situational optimism (self-efficacy) was assessed by asking participants how much weight they expected to lose and whether they thought they would be successful in losing that amount of weight. The researchers found no significant relationship between

dispositional optimism and weight loss. However, situational optimism was related to success. Participants who thought they would be successful in losing weight were more likely to be successful. Interestingly, setting goals to lose a greater amount of weight was significantly related to more weight lost, even though most participants did not actually reach their goals. One limitation in this study was the short length of treatment. It is unclear if setting high goals and being optimistic about individual success would be associated with success in a more long-term weight loss program, where an individual can plateau and become frustrated.

While the studies discussed above have found connections between weight loss and personality, other studies have failed to find any connection (Larsen et al., 2004; Poston et al., 1999). Poston et al. (1999) administered the Karolinska Scales of Personality to obese individuals prior to entering a weight loss program and they were not able to find any significant personality correlates with success. Larsen et al. (2004) used the Dutch Personality Questionnaire to compare the weight loss outcomes and personalities of people receiving bariatric weight loss surgery and did not have significant findings. There needs to be more research, with specific hypotheses, to gain a better understanding about what role, if any, personality plays in weight loss success.

Personality is a diverse topic that may be a piece of the weight loss puzzle; however, there does not appear to be enough conclusive evidence to use this information in a booklet for husbands attempting to support their wives' weight loss efforts.

Emotional eating. Food is often connected to the emotions experienced in times of joy and sorrow. Happy occasions, like birthdays and weddings, are traditionally celebrated with cake. Sad occasions, such as the death of a loved one, often involve

people bringing food to those who are suffering. While, for most people, food may provide occasional comfort, some people regularly use food as a coping mechanism to soothe or suppress emotions such as sadness, anger, frustration, loneliness, boredom, and hurt. Food can also be used to sustain or invoke a positive emotion. This psychological eating style is commonly called *emotional eating* and encompasses any eating that is not based on hunger.

Emotional eating can make losing weight and maintaining a healthy weight difficult (Blair, Lewis, & Booth, 1990; Canetti, Berry, & Elizur, 2009; Konttinen, Mannisto, Sarlio-Lahteenkorva, Silventoinen, & Haukkala, 2010). Of people participating in a weight loss program or undergoing bariatric surgery, participants who report higher incidence of emotional eating tend to lose significantly less weight than participants who report fewer incidents of emotional eating (Canetti et al., 2009). Similarly, Blair et al. (1990) found that individuals who reported a reduction in emotional eating over time lost significantly more weight than individuals who continued to report high levels of emotional eating. It is likely that emotional eating makes weight loss more difficult because eating when not hungry means that a person is consuming calories that his or her body does not require.

Another aspect of emotional eating that may contribute to difficulty in maintaining a healthy weight is the types of foods that are eaten. Emotional eating is associated with higher consumption of sweet foods for both women and men and higher consumption of non-sweet, calorie-dense foods for men (Konttinen et al., 2010). Sweet and salty foods are very pleasing to the taste buds and are naturally reinforcing. Eating more calorie-dense foods can lead to weight gain.

Geliebter and Aversa (2003) distributed a questionnaire about eating behaviors, emotional states, and situations, along with demographic questions, to 452 individuals at several major university and public libraries to assess emotional eating in overweight, normal weight, and underweight individuals. Participants were asked whether they ate much less, the same, or much more than usual, in response to various emotional states and situations. Questionnaires from the 15 men and 15 women who were the most overweight, 15 men and 15 women who were closest to normal weight, and 15 men and 15 women who were most underweight were compared. The overweight group (men and women) reported eating significantly more, compared to how much they usually eat, than the other groups when experiencing negative emotional situations or negative emotional states, which may be one reason for their greater weight. However, for positive emotional states and situations the underweight group reported eating significantly more than the normal weight and overweight groups. One possible reason that people in the underweight group's overeating during positive situations or states is not reflected in their weight is because the authors found that compared to their self-reported usual eating behavior, the people in the underweight group's under eating due to negative emotions or states was of a greater magnitude than their overeating during positive emotional states. Another possibility is that the underweight individuals experienced more negative than positive emotional states and situations, leading to less eating in general.

Given the evidence that emotional eating is a challenge to weight loss, researchers have investigated and theorized about the etiology of the behavior. Some researchers have defined emotional eating as an inability to distinguish hunger from other aversive internal states and the use of food to decrease emotional distress (Konttinen et al., 2010).

This behavior is most likely learned in childhood and, therefore, highly ingrained. Researchers studying parental influence on eating and obesity have identified parental behavior patterns that can contribute to eating when not hungry (Anzman, Rollins, & Birch, 2010; Esposito, Fisher, Mennella, Hoelscher, & Huang, 2009). Parents prompting their children to eat when they are not hungry (such as telling a child it is time to eat, whether she is hungry or not) or beyond satiety (such as telling a child to finish everything on her plate) can lead them to focus on external cues to eat rather than the internal physical hunger cues (Anzman et al., 2010). Parents using food to sooth any discomfort expressed by a child teaches a child to use food for comfort. Restricting highly palatable, high-calorie foods can lead to increased eating in the absence of hunger once the preferred foods are available (Esposito et al., 2009). Eating for comfort and eating to please others can result in a loss of the innate ability to eat when hungry and stop when full.

Green, Larkin, and Sullivan (2009) conducted a qualitative study of diet failure and asked dieters to talk about the reasons behind their failures to lose weight. All 11 participants reported some form of emotional eating. One common theme included eating to help regulate emotions. For some participants, being emotionally upset by other people led them to turn to food for comfort. Food was soothing, calmed the distress they were experiencing, and was easy to obtain. For one participant, emotional eating was a form of rebellion against the person who had upset her. It was her belief that eating to control her emotions was preventing someone else from controlling her emotions.

In addition to regulating emotions, the participants identified over-eating due to social activities as a theme (Green et al., 2009). For some participants, food was meeting

emotional needs because it was a way for them to connect with others. Social interaction and bonding often include food. Dieting can limit a person's choices eating out at restaurants and at parties. Therefore, it can be challenging to have social needs met when those activities usually revolve around food. This is especially difficult if a dieter views refusing food that was not on his/her diet plan as rude.

In summary, eating can be context-dependent with individuals responding to internal and external triggers to eat when they are not hungry. Individuals who eat for emotional reasons have learned to use food as a coping mechanism. They may lack other skills to regulate emotions and connect with others.

Emotional eating patterns that interfere with maintaining a healthy weight can be changed. Researchers and weight loss professionals have identified some ways to reduce incidents of emotional eating. The first step is to become aware of the difference between physical and emotional hunger (Hatfield, 2011; Mayo Clinic Staff, 2011). Emotional eaters often mistake emotional cues for physical cues when it comes to hunger. When the person wants to eat, they can rank, on a scale from one to ten, how hungry they are feeling in their stomach and then decide if they are feeding a physical or emotional need. Low scores are likely to indicate an emotional hunger and high scores indicate physical hunger. Keeping a log of what is eaten, the level of physical hunger the person is experiencing, the circumstances of the eating behavior, and thoughts and feelings prior to eating can increase awareness about triggers to emotional eating. For instance, a sense deprivation from restricting what one eats can be recognized as a trigger. Once people are aware of what triggers them and start listening to their internal fullness and hunger cues, they can try to avoid those situations or develop alternate coping mechanisms.

Creating *response cards* with helpful messages is a cognitive-behavioral therapy technique for challenging dysfunctional thoughts related to emotional eating (Beck, 2011). For example, a woman trying to lose weight, faced with a co-worker's birthday cake in the office break room, might think, "I am not hungry, but it's a special occasion. I should have some." Then she eats a big piece of cake and feels defeated because she has overeaten. Her dysfunctional thoughts led her to overeat and feel bad about the behavior. To change this dysfunctional thought pattern she could write out a message to herself such as, "My metabolism does not change for special occasions. It will treat all calories the same." Reading the response card before work each day may help her to make choices that she feels good about.

Distraction techniques, such as thinking about something else or doing an alternate activity, are other tools to reduce incidents of emotional eating. Appelhans, Whited, Schneider, Oleski, and Pagoto (2011) found that individuals who use distraction (thinking about something else) after becoming angry eat less than individuals who do not use distraction. Along with cognitive distraction, emotional eaters can engage in physical activities that may help distract them: take a walk, watch a movie, and/or call a friend. Taking their mind off eating and/or the emotion they are experiencing can be sufficient to avoid the initial urge to eat when not hungry.

Learning stress management skills can help reduce emotional eating. Yoga, meditation, and relaxation training are recommended for people who frequently engage in emotional eating (Mayo Clinic Staff, 2011). These alternate activities for calming negative emotions give emotional eaters options for calming their mind and body that do not involve food. Also, when experiencing stress or other triggers for emotional eating, a

person should try to avoid tempting foods: delay going to the grocery store, avoid entering a kitchen stocked with calorie dense foods, or avoid stocking the kitchen with such foods.

Despite the need to develop resources for reducing emotional eating, a husband's role in helping his wife with emotional eating has not been thoroughly studied. In Canetti et al.'s (2009) model of psychosocial predictors of weight loss, social support (measured by a 10-item scale that assesses social support provided by the person closest to the respondent) was not correlated with emotional eating. It is possible that this lack in finding a relationship between social support and emotional eating was because the closest person to the respondent did not know that the respondent could benefit from support related to emotional eating and/or how to be supportive. In fact, husbands may benefit from knowing that they can help their wives avoid emotional eating by listening to their wives' emotional stresses and/or offering diversions when their wives want to eat when they are not hungry.

Validated Approaches to Successful Weight Loss

As discussed in the previous section, there are many challenges to losing weight. However, there are methods for achieving success and they are based on the energy balance equation: eat less and move more. Weight loss occurs and depends on both personal and environmental conditions. There are some basic steps to losing weight that are present in many successful weight-loss programs. Table 1 shows the strategies four nationally recognized organizations recommend for losing weight (Bren, 2002; CDC, 2010; Mayo Clinic Staff, 2009; National Weight Control Registry, 2008). There is significant overlap, with the programs having many strategies in common: improving

eating habits (eating lower fat foods, including fruits and vegetables), reducing calorie intake, and increasing physical activity. Most included setting a realistic goal at the beginning of weight loss, based on expert advice for healthy weight loss, and making lifestyles changes (such as long-term adjustments to diet and exercise routines to maintain weight loss). Other strategies include: making a commitment; assessing your weight (using the Body Mass Index formula); monitoring progress by using techniques such as weekly weigh-ins or food and exercise journals; and getting support from friends, family, and/or professionals.

Table 1
Weight Loss Strategies Recommended by Nationally Recognized Organizations

Weight Loss Strategies	Centers for	Mayo	National	U.S. Food and
	Disease	Clinic	Weight Loss	Drug
	Control		Registry	Administration
Make a commitment	\checkmark	\checkmark		
Assess your weight	\checkmark			\checkmark
Set a realistic goal	\checkmark	\checkmark		\checkmark
Get support	\checkmark	\checkmark		
Improve eating habits	\checkmark	\checkmark	\checkmark	\checkmark
Lower calorie intake	\checkmark	\checkmark	\checkmark	\checkmark
Increase physical activity	\checkmark	\checkmark	\checkmark	\checkmark
Monitor progress	\checkmark		\checkmark	
Make lifestyle changes	\checkmark	\checkmark		\checkmark

Note. The data in this table are from "Losing weight: Start by counting calories," by L. Bren (2002), retrieved from http://fda.gov/fdac/features/2002/102_fat.html; "Healthy Weight," by CDC (2010), retrieved from http://www.cdc.gov/ healthyweight/; "Weight loss: Six strategies for success," by Mayo Clinic Staff (2009), retrieved from http://www.mayoclinic.com/health/weight-loss/ hq01625; and "The national weight control registry," by National Weight Loss Registry (2008), retrieved from http://www.nwcr.ws/default.htm

Social Relationships and Health

The fact that only two of the four organizations address social support suggests that this potential resource is underutilized. There are many behavioral methods for weight loss but people still have difficulty losing and maintaining weight loss. Therefore, there is a need to look at other avenues for intervention. Some weight loss researchers suggest obtaining social support as a method to improve weight loss efforts (Perri et al., 1988; Renjilian et al., 2001; Wing, & Jeffery, 1999). Before discussing social support and weight loss specifically, this author will review the connections between social relationships and health in general.

Definition of social support. *Social support*, a term widely used throughout the field of psychology, can have many meanings. Pierce, Sarason, Sarason, Joseph, and Henderson (1996) defined social support as "a complex construct (that) encompasses at least the following three components: support schemata, supportive relationships, and supportive transactions" (p. 5). Support schemata is a person's general expectation of how others will respond to their need for support. Support schemata can be assessed by asking a woman if she feels that someone would help her if she was in a situation where she required assistance. Supportive relationships are defined by a person's expectations of how specific people in his/her life would respond to his/her need for help. Supportive transactions are actions related to support. A person helping a classmate pick up some books they dropped or a son asking for and receiving financial help from his parents are examples of supportive transactions.

Many other authors have also developed definitions for social support that differ from Pierce et al. (1996), leading to some difficulty in comparing research on the topic

(van Dam et al., 2005). Given that social support does not have one definition agreed upon by the entire field, how individual researchers operationalize the term can be very different. This will be discussed further as individual studies are reviewed in this paper.

Social support and health. House, Landis, and Umberson (1988) reviewed literature related to social relationships and health and concluded: "More socially isolated or less socially integrated individuals are less healthy, psychologically, and physically, and more likely to die" (p. 241). Other researchers have found that social relationships are associated with less illness, improved recovery from illness, and longer lives (Gottlieb, 1987; McReynolds & Rosen, 2004; Schroder, Schwarzer, & Endler, 1997; Young, Cunningham, & Buist, 2005).

The article written by House et al. (1988) is considered a landmark study of the research to date on social relationships and health (Temkin-Greener et al., 2004). As of 1988, researchers in the field had found a correlation between having social connections and health for both humans and animals (House et al., 1988). The next step was to identify the mechanisms and processes linking social relationships to health.

Social control. One theorized link between social relationships and health is social control (Cohen, 1988). Logic, Okun, and Pugliese (2009) wrote: "Social control involves intentional efforts to change the behavior of an individual" (p. 1373). Social control theory also suggests that people care about what their friends and family think and that impacts their behavior. Lewis and Rook (1999) distinguished the two mechanisms of social control the following way:

First, social control operates *indirectly* when a person internalizes a sense of obligation to one or more significant others and, as a result, avoids high-risk

behavior so as not to jeopardize performance of these role obligations. Second, social control operates *directly* when network members prompt or persuade an individual to engage in health-enhancing behaviors or to discontinue health-compromising behaviors. (p. 63)

For example, Joe is concerned about his friend Sue's smoking. This leads him to give her a pamphlet about how to quit smoking. Sue decides to utilize some of the tools outlined in the pamphlet and stops smoking.

Since the early studies that explored social control, researchers have developed more complex models of how social control works (Logic et al., 2009; Okun, Huff, August, & Rook, 2007). Okun et al. (2007) tested four models of health-related social control. They found that positive social control (i.e. providing resources and positive reinforcement) can elicit positive affect while negative social control (i.e. ridiculing and pressuring) can elicit negative affect. Negative social control not only makes people feel bad, but is also associated with hiding of unhealthy behavior. For example, a husband tells his wife she is fat and he wishes she looked like a model on television. The wife then begins to eat healthfully in front of her husband, but sneaks candy bars when he is not around. Okun et al. (2007) found that hiding behavior was also correlated with positive social control in low quality relationships. In other words, in happy relationships people only hide bad behaviors if they are experiencing negative social control but in unhappy relationships any type of social control can lead to hiding behavior. The authors did not compare the levels of positive and negative social control in unhappy and happy relationships. However, their results suggested that both forms of social control existed in both types of relationships.

Logic et al. (2009) expanded on Okun et al.'s (2007) work on the effects of health-related social control, including an action readiness component. Logic et al. found that the relationship between positive social control and behavior change was mediated by both motivation to change and positive affect. They theorized that positive social control may improve motivation and lead to a greater likelihood of behavior change. On the other hand, negative social control's relationship to hiding unhealthy behaviors was mediated by negative affect and reactance (an impulse to fight against the perceived reduction in freedoms). For example, when a husband ridicules a wife for what she orders at a restaurant she feels sad and an urge not to let her husband control her. So, after he goes to bed she eats a pint of ice cream. She may feel more guilt after eating the ice cream, but she has also asserted her independence.

Interestingly, Logic et al. found that despite negative social control possibly leading to negative affect and reactance, negative social control was associated with positive health behavior change. Lewis and Rook (1999) found that positive social control predicted an increase in positive health behaviors, a decrease in negative health behaviors, and an increase in psychological distress. It is possible that despite the bad feelings and counter-productive reactions, a significant other encouraging positive health behaviors still works to improve health behaviors.

Marriage and Health

Marriage, a relationship with the possibility of a life-long social support partner, and its connection to health has been studied extensively. During the 1970s and 1980s researchers studied the relationship between marital status and health. They found that being married is often associated with being healthier and living longer (Goodwin et al.,

1987; Kotler & Wingard, 1989; Tucker, Friedman, Wingard, & Schwartz, 1996). The 1990s brought a new focus on the connection between the quality of the marital relationship and health. Researchers found that people who were happier in their marriage tended to be healthier (Ren, 1997; Ross et al., 1990; Wickrama et al., 1997).

Marital status. The early literature that explored the relationship between marriage and health focused on marital status without attention to marital quality and found mixed results. For the most part, researchers have found that married people are healthier than people who are not married (Goodwin et al., 1987; Kotler & Wingard, 1989; Tucker et al., 1996). In addition to being healthier, they live longer than individuals who are not married (Verbrugge, 1979). Married men and married women also recover from life-threatening disease, such as cancer, more often than their counterparts who are not married (Goodwin et al., 1987).

Individuals who are not married have been found to be less healthy than married individuals on objective measures (i.e. number of doctor's visits, rates of restricted activity and incidents of acute conditions; Verbrugge, 1979; Verbrugge, 1983).

Verbrugge (1979) found that divorced and separated people experienced acute conditions more often than married, widowed or single individuals. The formerly married also had the greatest rates of short-term disability and the highest number of doctor visits.

Goldman, Korenman & Weinstein (1995) found some evidence contrary to Verbrugge's (1979) findings regarding disability. Goldman et al. (1995) found that widowed men were more likely to be disabled than married men. There was a similar trend for widowed women, although it did not reach significance. However, divorced men and single women were less likely to become disabled than married men and women. Verbrugge's (1979)

sample was obtained from a national health survey and included all ages. Goldman et al.'s (1995) study only included people 70 years or older. This difference in the ages of the samples, as well as differing methods for assessing disability, may account for the difference between the findings of these two studies.

Married individuals have been found to recover from illness more often than individuals who are not married (Goodwin et al., 1987). Goodwin et al. (1987) found that male and female cancer patients who were unmarried had decreased survival rates. The unmarried individuals were more likely to be diagnosed at a later stage and less likely to seek treatment. The authors controlled for the effects of unmarried individuals' tendency to be diagnosed later and to be less likely to receive treatment, and still found a correlation between marital status and survival rates. Elstad (1996) also found that previously married participants reported more illness than did married participants (differences between groups were not specified).

Subjective measures, such as participant self-report of health status, have consistently shown disparities between the health of married and unmarried individuals. Verbrugge (1983) found that married parents had the best health profiles and non-married non-parents had the worst. This profile included the subjective measure of self-rated health and a daily health record. Ren (1997) found that on a measure of self-reported global perception of health, individuals separated from their spouses were 2.23 times more likely to report poor health compared to married individuals. Divorced individuals were 1.31 times and co-habitating-unmarried individuals were 1.35 times more likely to report poor health compared to married individuals. All three results reached statistical significance.

Marital status is also relevant when studying mortality statistics (Goldman et al., 1995; Kotler & Wingard, 1989; Tucker et al., 1996). Kotler and Wingard (1989) found, in a longitudinal study, that married individuals have a lower risk of early mortality compared to unmarried individuals. Tucker et al. (1996) found that consistently-married men and women lived longer than individuals with a history of marital breakup, with currently-separated or divorced individuals at the greatest health risk. Also, death rates for widowers were higher than for married men (Goldman et al., 1995). The same effects were not found for widows. The authors suggested that the gender differences might have been a function of women having created a social environment that compensated for the loss of a spouse.

Another interesting connection between marital status and health is marital status' relationship to health behaviors. Being unmarried is associated with more negative health behaviors (Umberson, 1992). The health behaviors measured included number of alcoholic drinks consumed per day; smoking; amount of sleep; physical activity; and BMI (although not technically a behavior, it is a reflection of health behaviors). Umberson (1992) also found that individuals who became separated, divorced, or widowed during the study were more likely to engage in more negative health behaviors than they did prior to becoming separated, divorced, or widowed. Resnick (2001) identified marital social support as an important factor in an older adult's participation in an exercise program. Married individuals also were more likely to have stronger self-efficacy expectations about pursuing an exercise program.

Marital quality and health. Marital quality has been shown to be related to health, with people who are happier in their marriages being healthier (Ren, 1997; Ross et

al., 1990; Wickrama et al., 1997). Researchers measure marital quality in different ways, most typically by assessing the level of satisfaction a spouse is experiencing in the marital relationship. Wickrama, Conger, Lorenz, and Matthews (1995) found that the quality of interactions affects health behaviors.

In an effort to gain greater understanding about the relationship between marital quality and health, Wickrama et al. (1997) studied 364 Caucasian married couples over a two-year period. The researchers found that individuals who reported higher marital quality over time, as measured by a questionnaire, reported less incidence of physical illness. Controlling for income, education, and work stress, Wickrama et al. (1997) found improvement in marital quality to be associated with a decrease in the incidence of physical illness.

Wickrama, Conger, Lorenz, and Matthews (1995) found a positive correlation between marital quality and perceived physical health. The researchers asked the participants to rate their own health and the health of their spouse. Marital quality was measured by each spouse's self-report of how happy they were with the relationship, along with an observer's rating of the quality of the relationship during a marital interaction task. Greater marital quality was negatively correlated with poorer health for both husbands and wives. The authors concluded that husbands and wives benefit equally from a greater degree of marital quality. However, it is possible that health status is impacting the marital quality. Regardless of the direction of influence, this evidence suggests that marital quality is positively correlated with health.

Despite the existence of a positive relationship between marital quality and health, the mechanisms whereby they are related is not fully understood. Wickrama et al. (1997)

theorized that marital quality influences health in two ways: first, through the mediating variable of increased psychological well-being and second, through an increase in positive health behaviors. Support for the first pathway comes from a study in which psychological well-being, as measured by items adapted from the General Well-Being Questionnaire, is positively correlated with physical health (Aneshensel, Frerichs, & Huba, 1984).

Wickrama et al. (1997) theorized the second possible pathway by which marital quality influences health is through promotion of positive health behaviors. Positive psychological states are positively correlated with the initiation and maintenance of positive health behaviors (Cohen, 1988; Duncan & McAuley, 1993). Wickrama et al. (1997) concluded that the individuals reporting a high level of quality in their marriage experience a high level of psychological well-being and, therefore, participate in health promoting behaviors.

Marital quality also has been found to relate to negative health behaviors (Markey et al., 2001; Wickrama, Conger, & Lorenz, 1995). Wickrama, Conger, and Lorenz (1995) obtained a sample of 320 men from the Midwest and compared data regarding their marital quality and health behaviors. Specifically, quality of marital interaction was measured by asking the husbands and wives about their participation in enjoyable activities together. The men then completed a questionnaire about their own health behaviors. Health behaviors included in the study were eating habits (eating three balanced meals per day), substance use (smoking, excessive drinking, and use of illegal drugs), and amount of sleep (numbers of hours of sleep per day), which were combined to create a risky lifestyle scale. Wickrama, Conger, and Lorenz found that pleasurable

marital interactions were correlated with less risky health behaviors in men. This study did not examine the health behaviors of women.

Wickrama, Conger, and Lorenz (1995) reviewed Umberson's theory about social control in marital relationships and proposed that positive interactions between spouses should positively influence each spouse's health behaviors. Wickrama, Conger, and Lorenz found that positive interactions did reduce the likelihood of negative health behaviors (i.e. smoking, excessive drinking and poor eating habits). Wickrama, Conger, and Lorenz stated that "(s)pouses who care and are concerned about one another should have a major stake in each other's continuing good health" (p. 100).

The mechanisms underlying the relationship between poor marital quality and physical health have been explored. Low marital quality is correlated with a decrease in psychological well-being and an increase in psychological distress (Ross et al., 1990). Psychological distress is related to a reduction in immune system functioning and an increased risk for illness (Kiecolt-Glaser et al., 1984). Kiecolt-Glaser et al. (1984) found that stressful life events (final exams) correlated with a decrease in Natural Killer Cell (NK) activity and a decrease in immune system functioning. Burns, Carroll, Ring, Harrison, and Drayson (2002) also found that stress was related to immune system functioning. The researchers found that participants with greater than average stress exposure had an increased risk of not producing a sufficient number of antibodies in reaction to a hepatitis B vaccine. Keicolt-Glaser, McGuire, Robles & Glaser (2002) found in a review of the literature that a discordant marital relationship is associated with immune system dysregulation. Gottman (1994) found that marital conflict caused adrenaline release that led to elevated heart rates. Chronic adrenaline release has negative

health consequences. In summary, the psychological distress and stress associated with low marital quality may lead to a reduction in immune system functioning and a higher propensity for illness.

Markey et al. (2001) studied both husbands and wives in their study of selfesteem, marital quality and unhealthy dieting behaviors. For wives, unhealthy dieting was
related to poor marital quality, the perception of little understanding from their spouse,
lack of harmony and lack of love. In their study of 187 European-American married
couples with at least one child, Markey et al. found that women who were less happy in
their marriage were more likely to engage in negative health behaviors, such as vomiting
and taking diet pills. This study suggests that for women health behaviors are related to
marital quality. None of the marital constructs predicted unhealthy dieting for husbands.
This is more evidence of gender differences in the connection between relationships and
health.

Social Support and Weight Loss

Social support, like marriage, is related to health. Social support can be an important and effective part of a weight loss plan. Social support is either elicited by creating peer support through group weight loss treatment or by involving significant others in treatment with the participant.

Group treatment for weight loss is often successfully used in clinical practice and research. Renjilian et al. (2001) compared the effectiveness of group therapy versus individual therapy for weight loss with 75 obese adults (the genders of the participants were not disclosed). When asked which form of therapy they would prefer, the participants expressed a clear opinion and were then randomly assigned to individual or

group cognitive-behavioral weight management therapy. After the 26 weeks of treatment, participants treated in a group setting lost significantly more weight than those treated individually. These results were significant regardless of which mode of treatment the participant stated they would prefer prior to treatment.

The power of social support in weight loss has also been utilized to improve maintenance of weight loss. During the 1980s, Michael Perri investigated ways to improve long-term weight loss maintenance through multi-component maintenance programs, incorporating social support (Perri et al., 1987; Perri, McAdoo, McAllister, Lauer, & Yancey, 1986; Perri, McAdoo, Spevak, & Newlin, 1984; Perri et al., 1988). Perri developed social support within the treatment program by instructing some of the participants to form peer self-help groups with other program participants. During treatment the groups would praise and encourage weight loss progress, monitor each other's weight, and problem-solve individual challenges as a group. They were also encouraged to meet regularly for up to a year after treatment had concluded. The results of each of the 1984 (11 men and 45 women), 1986 (14 men and 76 women), and 1988 (26 men and 97 women) studies listed above showed significantly greater weight loss maintenance for individuals who participated in the multi-component maintenance program (which included social support through peer self-help groups) than the participants that did not participate in the maintenance component.

Perri et al. (1987) separated some of the components of the maintenance program to assess the power of different forms of support. Participants (22 men and 87 women) either received only 20 weeks of behavior therapy for weight loss, behavior therapy plus instruction on forming peer support groups with 15 biweekly maintenance sessions

scheduled, or behavior therapy plus 15 biweekly maintenance sessions with their therapist. At the seven month follow-up the therapist contact group had maintained significantly greater weight loss than the other two groups. This suggests that therapist contact may be more effective than peer support in helping maintain weight loss. However, if the person continues to meet with the therapist then what makes it maintenance and not a continuation of treatment?

A finding from Perri et al.'s (1987) study that supports the idea of obesity as a chronic condition was that at the 18 month follow-up all three groups had regained significant weight, with no difference between the groups. Once therapist contact ended the participants decreased their adherence to the behavioral weight loss techniques and regained weight. It is possible, if not likely, that obesity requires lifelong support. If this is the case, then would it not benefit the obese person to have support come from a person who could be in their life long-term?

Weight loss researchers in the 1990s and beyond turned their attention to recruiting participants with significant others in an effort to improve weight loss and weight loss maintenance. Wing and Jeffery (1999) recruited participants alone or with three friends or family members. All participants (82 men and 84 women) received standard behavioral weight loss treatment in a group setting for four months. The participants recruited with significant others had a significantly lower attrition rate than those recruited alone (5% and 24%, respectively). At the end of treatment those who were recruited with friends and family had lost significantly more weight than those who were recruited alone. Another significant finding was that 66% of the participants recruited with significant others maintained their full weight loss six months after treatment,

compared to 24% of those recruited alone. This study is a definite endorsement for involving friends and family in weight loss treatment.

Other researchers have found less straightforward benefits to recruiting friends and family with participants (Gorin et al., 2005; Thomas, Hyde, Karunatne, Kausman, & Komesaroff, 2008). In their study of 45 overweight men and 55 overweight women, Gorin et al. (2005) found no significant difference in weight loss at 6, 12, and 18 months between those who participated in a behavioral weight loss treatment alone versus those who participated with significant others. One possible reason for the different results from Wing and Jeffery's (1999) study is that Wing and Jeffery included social support-eliciting activities for those participating with significant others and Gorin et al. did not. However, Gorin et al. did find that participants who had at least one successful partner (lost ≥10% of their body weight) lost more weight than participants who did not have any successful partners or those who participated alone. This suggests that being around people who are successful at losing weight might increase a person's chances of being successful in weight loss himself/herself.

Social networks are not always supportive in weight loss efforts. Thomas et al. (2008) conducted a qualitative study of weight loss with 76 obese individuals (13 men and 63 women) who had attempted to lose weight at some points throughout their lives. The researchers found that social networks had both positive and negative effects on the participants' attempts to lose weight. The majority of the participants reported that friends or family introduced them to particular diets or weight loss systems and were encouraging of their participation. However, many participants also reported feeling negative pressure from family and friends once they lost weight. Participants were told

that they were too thin and were encouraged to stop dieting. Some participants felt that their family members or friends had tried to sabotage their weight loss efforts. When asked about dieting with significant others, some participants reported feeling disillusioned if they lost less than their dieting partner and guilty if they lost more. Thomas et al.'s study showed the complex relationship between weight loss and social networks. This topic will be explored more when involvement of spouses in weight loss is discussed.

Marriage and Weight Loss

Arguably, marriage is one of the strongest social bonds within any culture. Based on love, tradition, the social importance of perpetuating the species, and the legal necessity for property rights related to heirs, the state of marriage provides social support for individuals, couples, children, and the society at large. It is no surprise that spousal support is an area of rich promise for many programs that focus on behavior change. In this study, the author takes the marital relationship and adds the issue of weight loss in order to examine whether an effective program can be developed that allows strong spousal support, in particular to women.

Marriage and weight. As discussed in the previous section about marriage and health, being married is often associated with good health; however, when it comes to obesity, marriage does not seem to be beneficial. Sobal, Rauschenbach, and Frongillo (2003) conducted a longitudinal study of weight changes and marital transitions. The researchers utilized data on 9,043 adults who participated in the U.S. National Health and Nutrition Epidemiological Follow-up Survey to assess changes in weight and marital status over 10 years. Women who went from unmarried to married in that 10 year period

gained significantly more weight than women who were married at both baseline and follow-up, although women in both groups gained weight. The researchers suggest that the reason for the greater weight gain, in the unmarried to married, might be role obligations that lead to more regular meals and reduction in individualistic activity involvement in exercise or sporting activities. Interestingly, the authors did not consider pregnancy as a possible contributor to weight gain for women. The majority of couples who get married have children and women often have difficulty returning to their prebaby weight after pregnancy. Regardless of the cause, marriage being associated with weight gain for women provides support for the importance of tailoring weight loss interventions to the needs of married women.

Sobal et al. (2003) found that women did not have significant weight change after being widowed, whereas men who were widowed and those who remained divorced or separated during the 10 year period were more likely to lose weight than the men who remained married during that period. The authors suggested that marriage provides men with the benefit of regular meals being prepared for them, leading men to lose weight if not in the marital relationship. Citing the traditional role of women as the meal preparers in the family as a reason men lose weight after widowhood or marital dissolution, the authors speculate that if a man does not have a wife to cook for him, he probably does not eat as much. Unfortunately, this study does not indicate whether the participants were underweight, within a healthy range, or overweight. This makes it difficult to know whether it is beneficial to the participant's health to lose or gain weight. However, as a representative sample of the population of the United States, it is probably more beneficial to health for the participants to have lost rather than gained weight.

Involvement of spouses in weight loss treatment. Weight loss researchers have included spouses in weight loss treatment in an effort to improve initial weight loss and weight loss maintenance. In a review of randomized trials of family involvement in weight loss interventions, McLean, Griffin, Toney, and Hardman (2003) found that overall, spouse involvement appeared to be beneficial. However, not all researchers have found increased weight loss or maintenance with spouse inclusion in treatment. McLean et al. noted that the number of studies conducted in this area was low. The majority of the studies were conducted in the 1970s and 1980s. It is unclear why this is so (except that research into topic areas seems to happen in waves) and what the implications the age of the research have on the generalizability to today's society. More current research on the topic might be beneficial.

Two studies included spouses in behavioral treatment for obesity as a form of social support with positive results for spouse involvement (Brownell, Heckerman, Westlake, Hayes, & Monti, 1978; Pearce, LeBow, & Orchard, 1981). In the experimental groups in the Brownell et al. (1978) study, the spouse of the person receiving behavioral weight loss treatment received training in modeling healthy behaviors, monitoring, and reinforcement techniques. Participants in the control groups received behavioral weight loss treatment, but spouses did not receive any kind of support training. Brownell et al., using a sample of 19 obese women, 10 obese men, and their spouses, found no difference initially post treatment, but at the three and six month maintenance assessments the participants whose spouses received training had lost significantly more weight than the participants whose spouses did not receive training. The authors did not specify if the spouses were instructed to continue the supportive behaviors post treatment.

Impressed with the findings of Brownell et al. (1978), Pearce et al. (1981) wondered if the apparent positive effect of spouse involvement in treatment was due to active spouse training or simply preventing sabotage of the participant's efforts by the spouse. Using a sample of 68 overweight women and their husbands, the researchers tested this by adding what they called a nonparticipating spouse group to their experiment. This group was sent letters just prior to the commencement of treatment asking them not to sabotage their wives' weight loss efforts by offering high calorie foods, nagging, or criticizing their wives. Other than not sabotaging, the husbands were asked to ignore their wives' efforts to lose weight. These researchers found no significant differences in weight loss among the three groups at the end of treatment or at the three and six month follow-ups. However, at the 12 month follow-up the group whose spouses had received active spouse training had maintained significantly more weight loss than the group without spouse intervention. This suggests that an active and supportive spouse intervention might be most beneficial to the long-term maintenance of weight loss.

Several researchers have found that spouse involvement was not beneficial to weight loss (Black & Lantz, 1984; Dubbert & Wilson, 1984). Black and Lantz (1984) conducted a study to evaluate spouse involvement and contracting in treatment of weight loss. At the termination of treatment, there was no significant difference in weight loss between participants who attended treatment with husbands and those who attended alone. However, at the one year follow-up participants who attended treatment alone and contracted with their therapist lost significantly more weight than participants who attended treatment with their husbands and contracted with their therapist. One possible reason for no apparent benefit (and possible detriment) to husbands attending treatment

was that all participants' spouses had to be willing to participate. Spouses were required to sign a statement indicating support, whether they were actually included in treatment or not. This is consistent with Pearce et al.'s (1981) idea that lack of sabotage is enough to be helpful in weight loss efforts.

There is conflicting data on the effect of spousal support in weight loss. One reason for this conflict may be that there is not one single solution to weight loss. As discussed previously, many treatment programs are effective in producing weight loss. Eat less, move more. However, maintenance is so challenging that weight loss becomes a game of inches, literally and figuratively. Spousal support may be a small piece of the weight loss puzzle that can help many, but not all, people. While not everyone may benefit from spousal support during an attempt to lose weight and maintain weight loss, the fact that some people could benefit is reason enough to develop tools to encourage spousal support.

A second possible reason for the conflicting data regarding spousal support and weight loss is that there are no clear guidelines for how to support someone who is trying to lose weight or maintain weight loss. Even the vocabulary of weight and body shape is a challenge. Women and men have different meanings for words related to weight (Miller-Kovach, 2007). Most women view being called thin as a compliment, while many men view being called thin as an insult. Wing et al. (1991) conducted a study with obese individuals with type II diabetes and their spouses. They found that women were more successful at losing weight when treated with their husbands, while men were more successful when treated alone. Whether male or female, some people like to share their

every weight loss trial with their partner while others prefer to not talk about it.

Individual differences make it more difficult for research to generalize to the population.

Contributions From the Marriage and Family Therapy Literature

Another possible reason that all studies have not shown a positive effect of spousal support on weight loss is that marital relationships, and relationships in general, are complicated. Marriage and all the interactive relations within a family are frequently looked at as a system. Family systems theorists view the family as an organism (Brown & Christensen, 1999). Similar to the body, a family is made up of parts that interact and sometimes are dependent on each other for meeting their goals. A tenet of family systems theory is that the family has a tendency to seek stability or homeostasis. The majority of us are most comfortable when things stay the same and do not change. So, when one member of a family decides to change a personal characteristic, other members of the family may resist that change. To put this in the context of weight loss, when a mother wants to lose weight, the father may fear the changes she is trying to make and unconsciously, or consciously, sabotage her efforts. He can refuse to care for the children while she goes to the gym or bring home her favorite dessert as a special present.

The disruption of family routine can be a powerful reason for people to resist a family member's weight loss efforts (Barbarin & Tirado, 1984). If a mother wants to eat more healthfully, she may begin cooking more healthy meals with foods the family finds unfamiliar. As the children complain nightly that they do not like the type of food she is making, she begins to question her resolve to lose weight and eventually gives up. Weight loss behaviors can be affected by the reaction of family members to the behaviors.

Families often view psychological issues, including the psychological factors that contribute to weight gain and the maintenance of obesity, as individual problems.

However, family systems theorists view the *identified patient* (the person who is thought to need to be fixed; the overweight person) "as a symptom of a dysfunctional system" (Brown & Christensen, 1999, p. 60). Obesity has multiple causal factors and it would be inaccurate to suggest that obesity is caused exclusively by family systems issues; however, there are ways that obesity can serve the family system and help to maintain homeostasis.

McDaniel, Hepworth, and Doherty (1992), in their book *Medical Family Therapy*, wrote about how obesity can serve multiple inclusiveness functions in families: (a) *loyalty to the family*, (b) *coalitions in the family*, (c) *delaying entry into the adult world*, and (d) *protecting the marriage*, and therefore be difficult to treat. In many families obesity runs through the generations and can provide a sense of family identity. When one member of the family attempts to lose weight, the rest of the family may view it as an act of disloyalty. When the individual fails to lose weight or maintain weight loss, the rest of the family welcomes them back into the fold and loyalty to the family is reaffirmed.

Coalitions within the family are another way that obesity is maintained. If one parent is obese and the other is not, a child may subconsciously gain weight to show alignment with the obese parent. On the other hand, families may contribute to a child being obese in an effort to delay their entry into the adult world. Negative reactions from society to the obese child might make them stay closer to their family emotionally and physically. This protects the boundary of the family unit but does a disservice to the individual. Obesity can serve the function of protecting the marriage, too. McDaniel et al.

(1992) stated that some couples admit to concerns about infidelity if one or both spouses lose weight, presumably making them more attractive to the opposite sex. The weight acts as a security blanket over the relationship, regardless of whether weight loss would have any actual impact on a person staying faithful.

McDaniel et al. (1992) looked beyond familial inclusion functions to control patterns within couples that can impact weight. McDaniel et al. suggested that *maintaining control by losing control* occurs when what started out as providing support by encouraging healthful behaviors begins to feel coercive. The spouse then rebels against this perceived coercion by engaging in the unhealthy behavior. For example when a husband discourages his wife (who is on a diet) from eating a high calorie dessert, and she feels he is trying to control her, she reacts by eating the dessert to spite him. She gains her sense of independence, but loses another battle in the weight loss war.

Sexuality can also be related to obesity from the family systems perspective (McDaniel et al., 1992). Gaining weight can be a way to limit sexual contact for a person who is having difficulty regulating emotional closeness. For example, a wife who is unhappy in the relationship but unsure of how to address her discontent might gain weight in an effort to distance herself from her husband sexually and emotionally. A husband might encourage his wife to gain weight or stay at an unhealthy weight in an effort to make her less attractive to other men.

In a study of family processes and obesity treatment, Barbarin and Tirado (1985) looked at characteristics of families, specifically enmeshment, and their relationship to weight loss maintenance. The authors defined enmeshment as "the degree of emotional closeness and the extent to which family members have common attitudes, feelings, and

reactions," with disengagement being at the opposite end of the spectrum (p. 117). Enmeshment was measured using a subscale of the Family Process Scale. Participants were divided into the enmeshed or disengaged groups based on a median split of standard scores on the subscale. Enmeshed and disengaged are traditionally viewed as unhealthy family states that represent dysfunction (Brown & Christensen, 1999). However, by Barbarin and Tirado using a median divide for categorization, families nearer the middle of the enmeshed/disengaged spectrum were given the label they scored closest to, whether they were dysfunctional or not.

In the study, successful maintainers of weight loss from enmeshed families reported significantly higher levels of satisfaction with family life and greater family support than unsuccessful maintainers from enmeshed families (Barbarin & Tirado, 1985). On the other hand, satisfaction with family life and greater family support did not distinguish successful weight loss maintainers from unsuccessful weight loss maintainers when the authors compared participants from disengaged families. This connection, although not causal in nature, speaks to the power of the family. It may be that if a person is disengaged from their family, the family is less able to positively or negatively impact weight loss success. In this situation, the weight loss results are based on individual factors not family influence.

Harkaway (2000), in a commentary on obesity and systems research, discussed a challenge of this type of research being the heterogeneity of systems. "There are innumerable arrangements of relationship humans can create, with a myriad combination of factors. Put these two together and you have a formidable research challenge" (Harkaway, 2000, p. 56). If there is a large amount of variation among families as to their

connection to a member's weight loss efforts, then it is no wonder that the data do not show a clear cut benefit of spousal involvement. Much of the family systems research has the limitations of small sample size or lack of control groups (Ganley, 1992). Barbarin and Tirado's (1985) study may have illuminated even more of the systemic processes related to weight loss if they had included a group scoring in the midrange to compare to extremes of enmeshed and disengaged families.

The majority of research on the topic of spousal or social support in weight loss has been quantitative, as discussed in previous sections of this literature review. Beverly et al. (2008) took a different approach and conducted a qualitative study on this topic with 30 diabetic patients and their spouses. (Twenty-three of the couples had one spouse with diabetes and seven of the couples had both spouses with diabetes. The authors did not identify the gender of the person with diabetes for the couples with only one spouse having the disease.) Diabetes affects 12% of men and 11% of women ages 20 years and older. Of the over 25 million people with diabetes, 90-95% have type II diabetes (National Diabetes Information Clearinghouse, 2011). The researchers conducted focus groups with both spouses to identify how the spousal relationship could translate into adherence to a healthful diet. Over 85% of people with type II diabetes are overweight, and losing weight can help prevent or delay health complications from diabetes (Weightcontrol Information Network, 2011a). Five core themes were identified by the focus group participants as challenges to adopting a more healthful diet: (a) control over food, (b) dietary competence, (c) commitment to support, (d) spousal communication, and (e) coping with diabetes.

Control over food was a challenge for focus group participants with diabetes and their spouses (Beverly et al., 2008). For 27 of the 30 couples, the wife made the food-related decisions in the household. Many of the husbands reported resenting their wives' control over their diet and nagging about the husbands' food choices. Some husbands reported hiding unhealthy food in the house, so they could eat in secret. This is consistent with McDaniel et al.'s (1992) concept of maintaining control by losing control. Couples in which the wife was diagnosed with diabetes had different dynamics related to food control. Instead of resenting a lack of control over food choices, "women diagnosed with diabetes perceived a lack of support from their husbands regarding dietary choices" (pp. 712-713). This is consistent with this author's previous discussion about men being less likely to offer to support their wives in weight loss because of gender roles and socialization.

Two other themes that Beverly et al. (2008) identified from their focus groups that are applicable to this project are commitment to support and spousal communication. Commitment to support was expressed as the spouses' willingness to work together daily to manage a chronic disease. When support was lacking, participants reported less healthful eating patterns. Couples that reported more spousal communication about diabetes reported more spousal support and greater dietary adherence.

Beyond communicating information, communicating praise can be an important part of supporting someone in his/her weight loss process. Marcoux et al. (1990), in their study of social networks and social support in weight loss, found that appraisal support (e.g. praising a person for following her diet and complimenting a person's behaviors) was the type of support most strongly correlated with weight loss. It appears that

communication and a willingness to treat chronic illness as a team are important to successful long-term management of diabetes, a condition that requires considerable change in diet, often requiring loss of weight. It is likely that these factors are important to weight loss in general.

Marital and family processes can contribute to obesity and make it more challenging for a person to lose weight and maintain weight loss; they can also help a person through the weight loss process. The marriage and family therapy literature about weight loss provides concrete examples of ways to support a spouse in weight loss, such as appraisal support, spousal communication and commitment to support. Also, providing information to spouses about how and why they may be sabotaging their spouses' weight loss efforts could lead to awareness that is sufficient to stop the behavior. Another possibility is that by learning about family systems factors that may contribute to obesity, such as maintaining control by losing control and loyalty to the family, the couple realizes that they have relationship issues that need to be discussed with a professional marriage counselor, who can help them work through the underlying issues making weight loss more challenging.

Gender and Communication

The goal of this project is to create a resource for husbands whose wives want to lose weight or maintain weight loss. This involves a woman writing a booklet for men who will use the information to help women (their wives). While these men and women technically speak the same language, the intended meaning of the words they use can be lost in gender translation. Researchers have found that men and women can have very different views on the same conversation, based on their gender (Tannen, 2007). From an

early age, males and females show differences in learning, processing emotions, and communication (Hodgins, 2010). Two parts of gender-based communication were considered for this project: (a) how knowledge of women's communication style preferences may help a man approach the topics surrounding weight loss in a more productive manner than he might without this knowledge; and (b) this author considered gender communication styles in the construction of the booklet, so men will want to read the booklet and implement what they learn.

Linguistics professor Deborah Tannen (2007) has researched men and women in communication and found strong differences in how men and women communicate based on how each gender views the world. Men tend to view the world as having a hierarchical social order in which a person is usually higher or lower in social standing than another person. This leads men to view conversation as a negotiation to establish or maintain the one-up position and to protect themselves from being put down or pushed around.

According to Tannen, men view life as a contest. They want to avoid failure and preserve independence. Tannen (2007) found that women, in general, view life very differently than men. For women, life is about community. They have a desire to avoid isolation and preserve intimacy. From this perspective, a woman is "an individual within a network of connections" (p. 25). Women use conversations to try to increase closeness, give and elicit support, and find consensus. Women try to avoid being pushed away by others.

Both men and women seek some level of intimacy and independence, however, women's greater focus on intimacy and men's greater focus on independence can be in direct conflict as men and women attempt to navigate romantic relationships. When a wife asks her husband where he went throughout his day, she may be trying to connect

through sharing experiences, whereas the husband may view the question as an example of his wife acting parental and trying to reduce his independence. When he responds by saying "nowhere" to avoid being in a lower hierarchical position in the relationship, his wife feels rejected and experiences a lack of intimacy. Both husband and wife have good intentions, but the result is discord.

Talking with a wife about her weight, diet, or exercise program is challenging enough to a relationship without considering the miscommunication that can result from gender communication differences. Women tend to console each other by sharing about a similar problem they have had when another woman talks about a problem (Tannen, 2007). For example, if a woman mentions to a female friend that she is feeling down because she gained five pounds, the friend is likely to discuss her own struggle with her weight. Men approach talk of troubles very differently; they tend to want to solve the problem (Tannen, 2007). If the aforementioned woman expresses to a man that she is feeling down because she gained five pounds, he might respond by telling her to start running and she will get that weight off in no time. His response would be helpful, if the woman were looking for the solution to a problem, but not if she is really looking for validation and bonding through shared experience. Men would benefit from knowing that women usually do not want emotional problems solved; however, fixing mechanical equipment is often appreciated (Tannen, 2007). So if a woman states that she is frustrated because her treadmill stopped working, it is likely that she would appreciate having it fixed. These intricacies of female communication can be perplexing to men. When in doubt, the solution may be to ask the woman if she wants him to listen or if she wants advice.

There are some gender-based communication differences that are important to the construction of a manual for men. Men tend to be visual learners and tend to rely on non-verbal forms of communication (Hodgins, 2010). Therefore, a manual should not solely rely on text but incorporate pictures and graphics to illustrate important points. Men often use deductive reasoning when learning new concepts (Hodgins, 2010). This type of reasoning involves understanding a general principle about something and then applying it to individual cases. For example, the general principle is that eating fewer calories than are expended will cause weight loss; a specific application is that if my wife eats smaller portions of food, she will lose weight. The manual should start with general concept principles, and then follow with specific examples that apply to the concept.

Another important communication difference between men and women is that in written text women communicate more emotionality than men (Colley et al., 2004). A woman may be swayed to read and apply principles discussed in a manual if she reads an emotional story that piques her interest. This may not have the same effect on a man. Men may be more likely swayed by the ability to help someone else and show their expertise. As Tannen (2007) stated, "Giving help puts one person in a superior position with respect to the other" (p. 32). By helping his wife, the man feels good about his position in the relationship and the woman's need for connection is met by her husband implementing the manual's strategies.

The effectiveness of a resource for men who want to help their wives lose weight is enhanced by including gender communication differences as a part of the information provided to help husbands understand and support their wives and as a consideration in the format, organization, and style of the booklet. Husbands reading the booklet will learn

about gender communication differences in a way that supports deductive reasoning and masculine learning styles. Since communication preferences vary, husbands are encouraged to talk with their wives about how this applies to their communication as a couple, especially in conversations about her weight loss goals. Having created the booklet with men's communication preferences in mind increases the likelihood that men will use the information to support their wives in achieving weight maintenance goals.

Summary

There are many challenges to weight loss and maintenance of a healthy weight.

Many people are successful at losing weight but have difficulty keeping it off. Despite this discouraging fact, there are some well-established methods for losing weight (such as improving eating habits, decreasing calorie intake, and increasing physical activity).

Beyond behavior changes, social relationships have been identified as having an impact on weight loss. In general, social relationships and social support are associated with better health and living longer. One theorized way that social support is related to health is through social control (intentional efforts to influence another person's behavior). For example, encouraging someone to exercise can be helpful to that person meeting his/her health goals. However, people differ in the amount and type of support they desire, and people who desire to be helpful may lack knowledge of what to do.

Marriage provides the possibility of a built-in support partner and has significant connection to health. Married people live longer and are healthier than people who are not married. Those happy in their marriage tend to be healthier than those who are not happy in their marriage. Marital quality is also associated with health behaviors, with positive interactions being associated with reduced incidence of negative health

behaviors. At the same time, marriage is associated with weight gain, and therefore is an important context for intervention.

Spouses have been included in weight loss treatment with the majority of researchers finding spouse involvement to be beneficial. Some possible reasons that not all researchers have found spouse involvement to be beneficial are that families have complicated dynamics and can resist change, the influence a spouse has in a person's weight loss efforts varies, and not everyone may benefit from spousal support. However, the literature suggests that many people do benefit from spousal support and that is a sufficient reason to help spouses develop support skills. To that end, marriage and family therapy offers a largely untapped resource for concepts and strategies that may help husbands be more successful in helping their wives meet long-term weight loss goals.

Much of the information gathered from this literature review could be helpful knowledge for husbands whose wives are attempting to lose weight or maintain weight loss. However, this mostly academic information does not appear to be accessed by the people who are continuing to struggle with being overweight. Combining the topics of successful weight loss strategies, social support in weight loss, gender communication, and family dynamics that may impact weight loss into a booklet for husbands whose wives are attempting to lose weight or maintain weight loss provides a unique resource in the weight loss battle.

Chapter III. Methodology

The goal of this dissertation was to develop a resource booklet for husbands whose wives are attempting to lose weight or maintain weight loss. The resource is focused on knowledge, attitudes, and behaviors that husbands can use to support their wives in losing weight and maintaining the weight loss. The resource may be used directly by husbands, or weight loss support groups and combined with contact with mental health professionals. For example, if a couple is seeking relationship counseling and the wife complains that the husband sabotages her weight loss efforts, the therapist can provide the husband with the booklet or use it as talking points for a discussion of the issue. Weight loss professionals may also find this resource helpful. For example, if they are leading a women's weight loss support group, the leader can provide the booklet to members whose husbands want to help but need guidance. This chapter describes the methods that were used to create this resource.

The first phase of this endeavor included an extensive review of research studies and writings on the subjects of weight loss, weight loss maintenance, social support and weight loss, marriage and health, involvement of spouses in weight loss intervention, contributions from marriage and family therapy, and gender and communication. The second phase included writing the literature review and examining the literature to discover the most applicable material for inclusion in the resource. The next phase was the creation of the resource booklet with informal review by people with personal or professional interest in the field.

Identification of Relevant Literature and Existing Resources

This researcher conducted a review of articles and book abstracts in psychological and medical fields databases: PsycINFO, PsycARTICLES, MEDLINE, Dissertation Abstracts and Web of Knowledge. Also non-academic works on this topic were searched through the Internet. Publications from national organizations, including the American Psychological Association, the American Psychiatric Association, and organizations that promote and/or facilitate weight loss, were reviewed. This researcher took special care to search for currently available resources for husbands whose wives are trying to lose weight or maintain weight loss. The literature review concentrated on topics related to weight loss and weight loss maintenance, social support and weight loss, gender differences and weight loss, marriage and health, involvement of spouses in weight loss intervention, gender and communication, and relevant contributions from the marriage and family therapy literature. Marriage and family search terms included family systems and behavior change, marriage and identified patient, marriage and sabotage, and sabotage and behavior change. Because the goal of weight loss is commonly discussed in the literature on chronic disease management, that literature was searched for studies that address the role of spouses of people with chronic illness. Within the topic of social support, social control (telling, reminding or threatening others to encourage positive health behaviors or discourage negative health behaviors) was explored. The following keyword combinations were utilized in the search:

- (spouse or husband or wife or partner) and weight loss
- (spouse or husband or wife or partner) and weight loss maintenance
- marriage and (weight loss or weight gain or weight loss maintenance)

- marriage and health
- (marital quality or marital satisfaction) and health
- (marital quality or marital satisfaction) and (weight loss or weight gain or weight loss maintenance)
- marriage and obesity
- family and (weight loss or weight gain)
- (marriage or spouse) and chronic disease management
- (social involvement or contact) and (weight loss or weight gain)
- social control and (weight loss or weight gain)
- social support and (weight loss or weight gain)
- (gender or gender differences) and weight loss
- marriage and behavior change
- family systems and behavior change
- marriage and identified patient
- marriage and sabotage
- sabotage and behavior change
- race and obesity
- race and weight loss
- ethnicity and weight loss
- gender and communication
- gender and learning
- gender and help
- gender and written communication

- gender differences and written communication
- personality and weight loss
- emotional eating and obesity
- emotional eating and weight loss

Abstracts of the articles accessed by these searches were reviewed, and relevant articles were downloaded. Types of articles included quantitative and qualitative studies, review articles, and original commentary. The studies were evaluated for their quality and the validity of the designs and conclusions. A literature table was constructed for the most relevant articles, using the following column headings: Author/Title, Intention of Study, Variables and Measures; Participants; Method; Results; Conclusions; Analysis/Comments (see Appendix A).

Beyond the initial literature search, additional steps were taken to ensure that the literature review was comprehensive. First, the reference lists of the articles found in the above search were reviewed to identify any pertinent resources that were not previously identified. Second, if the articles found in the initial search included key words that apply to this project, but were not previously used in the literature search, the new key words were added as search terms. Third, *Web of Science* was used to find recent articles that cite studies already identified as pertinent.

Development of the Resource

During this phase of the project the author:

- Reviewed and synthesized literature from the literature review.
- Created the table of contents.
- Organized the collected information into topic areas.

- Gathered informal feedback about developing an informational booklet for men by talking to men about their likes and dislikes in informational booklets.
- Worked with Dissertation Committee Chairperson to develop a draft of the booklet.
- Sent draft of the booklet to committee members.
- Received and incorporated feedback from committee members. The
 changes included removing academic terminology and replacing it with
 explanations of concepts in commonly used terms, including more
 information about emotional eating, rearranging the content, and
 improving the scripts by making them sound more conversational.
- Completed booklet, adding graphics and other aesthetic components (see Appendix B).
- Booklet was informally evaluated by couples with wives attempting to lose weight.

Table 2
Informal Review Demographic Information

Couples	Age	Years Married	Weight Status
Wife Husband	33 35	2	Wife overweight and attempting to lose weight
Wife Husband	35 37	15	Wife overweight and attempting to lose weight
Wife Husband	34 40	7	Wife attempting to maintain healthy weight after weight loss

Evaluated informal couples' feedback. All of the husbands and wives who read the booklet stated that they could relate to the content and see examples in their own relationships of the content discussed. All of the wives expressed that they would want their husband to read and apply strategies from the booklet. Each husband identified specific ways he could be more supportive, based on reading the booklet. Two of the husbands stated that at the beginning of the booklet they felt somewhat at fault for their wives' being overweight. In response to this feedback, the author added text about a wife's weight status not being her husband's fault, in an effort to avoid a husband feeling blamed and therefore discontinue reading the booklet. Another theme discussed by two of the husbands was that the booklet cover, including the title, was not eyecatching. Formal evaluation of the booklet should include discussion of what type of cover page would entice a husband to want to read the information inside the booklet.

Design and format. The length of the resource is 42 pages; additional length might be a deterrent to husbands wanting to read the booklet. The resource is visually attractive, includes graphics, and provides sample scripts and short examples. Self-assessment questions are included.

Content of the resource. The following is a description of sections included in the resource:

"Is this booklet for me?". The first section of the booklet discusses who the booklet is written for and why the reader would benefit from reading the booklet. The

focus is on piquing the husband's interest. The reader is informed that the booklet is intended to help husbands learn how to support their wives weight loss goals, not to help them convince their wives to lose weight.

Gaining weight is easy, losing weight is hard. This section discusses information about weight gain and identifies the difficulties in losing weight and maintaining weight loss, including emotional eating, the differences between men and women in weight loss, and the connection between marriage and weight.

Understanding the framework for change. This section identifies the health consequences of being overweight or obese and the lifestyle changes that can lead to long-term weight loss. Husbands need to understand how weight is lost and a healthy weight is maintained so that they can support their wives in the behaviors that lead to success.

"How can I support my wife?. This section discusses the importance of being a supportive spouse, gender differences in support, and how to learn exactly what your wife thinks is supportive. Some women may like their husbands to take an active role in the behavioral aspects of their weight loss, while others prefer their husbands only provide compliments as they notice positive physical changes.

How families work. Family ties can have a negative impact on weight loss. This section of the booklet includes information from the marriage and family systems literature. Family obstacles to change that are discussed include loyalty to the family, coalitions within a family, and protecting the marriage.

Motivation to change. This section teaches husbands about the stages of change (Prochaska & DiClemente, 1982), so the husband can identify where his wife is in the

process of making behavioral changes that lead to weight loss. The reader is given suggestions for how he can support his wife at each stage of motivation.

Ten guidelines for supporting your wife. The ten guidelines are specific examples of how husbands can support their wives' weight loss efforts. Suggestions on developing strategies to support specific lifestyle changes and situational challenges to weight loss and weight maintenance goals are discussed.

Troubleshooting. This section covers the topics of sabotage by a husband and self-sabotage by a wife. Sabotage is discussed as an often unconscious act that can negatively impact weight loss and husbands are given a 15-item questionnaire to help them identify and prevent sabotage. The importance of communication is also discussed in this section.

Ask your wife about her plan and how you can help. This section includes questions a husband can ask his wife about her plan to lose weight or maintain weight loss and how she wants him to support her.

Conclusion. This section encourages the husband to use the information contained in the resource to support his wife in her weight loss and maintenance goals.

Resources. This section describes books and websites that might be helpful to husbands trying to support their wives' weight loss efforts.

Summary

The goal of this proposed project was to develop a resource booklet for husbands whose wives desire to lose or maintain weight loss. The author conducted an extensive review of literature related to the topic, synthesized the information, and created a unique contribution to the field. The author conducted an informal evaluation of the booklet by

showing it to three married couples. The feedback was incorporated into the final resource booklet.

Chapter IV. Discussion

Two thirds of the population of the United States are overweight or obese, creating a largely self-induced health crisis (CDC, 2008a). Being overweight and/or obese are risk factors for multiple major illnesses, some of which can lead to death. For the most part, Americans are aware of the health consequences of obesity and many have tried to lose weight; yet, the majority of these people are unsuccessful at losing and maintaining weight loss (Wing et al., 2006). Knowledge about how to lose weight does not appear to be sufficient for achieving weight loss and maintaining a healthy weight.

Researchers have looked to social systems for keys to improve weight loss and weight loss maintenance by providing the overweight person with support partners, with mixed results. Within relational systems, marriage can be an ideal context for lifestyle change, if both spouses have a desire to support, and not sabotage, each other's health goals and are knowledgeable about how to be supportive.

The purpose of this dissertation was to create a unique tool in the weight loss battle by developing a resource booklet for husbands who would like to support their wives' achievement of self-identified weight management goals. Researchers have found that women have more difficulty losing weight and maintaining weight loss and are less likely to receive support from their spouse compared to men (Wing et al., 1991). Husbands may not know how to support their wives' weight loss efforts or even that they need support. By reading this booklet men can learn that their wives need support and how to support them, which could lead to their wives having greater weight loss success and improved health.

The procedure for this dissertation was to review literature on weight loss, weight loss maintenance, social support, marriage and health, spousal weight loss support, marriage and behavior change, gender and communication, and applicable contributions from marriage and family therapy, to identify information husbands should know to help them support their wives' efforts to achieve weight loss goals. The information was evaluated, synthesized, and then organized into topic areas. The result was a 42-page booklet covering a broad range of topics: facts about weight gain and weight loss, emotional eating, the importance of being a supportive spouse, communication, family obstacles to change, motivation, supportive actions to take, sabotage, and deeper psychological issues that may impact weight. The booklet also contains resources (books and websites) for husbands to learn more about how to support their wives' weight loss efforts.

Strengths of the Resource

One strength of this booklet is that it is created to help husbands support their wives, not to convince their wives to lose weight. A search for similar resources found many articles and commentaries written about how to encourage or convince a wife to lose weight when that was not the wife's goal. The booklet reader is warned that the booklet is not intended to provide him with tools to help him convince his wife to lose weight. By focusing on support, and not influence or manipulation, this booklet reduces the likelihood of discord that can result from a wife feeling that her husband is trying to control her and/or pushing her to lose weight.

A second strength of this resource is that it synthesizes information from multiple disciplines to give husbands a set of strategies for supporting their wives. The booklet not

only covers expected topics like nutrition, exercise, and challenges to losing weight and maintaining weight loss but also integrates topics specific to the process of behavior change, marital communication dynamics and family systems theory that are relevant to maintaining a healthy weight. The husband will learn the many reasons that his wife may have difficulty maintaining a healthy weight, such as her not being ready to change, the influences of family patterns that encourage weight gain, and how his own sabotaging behaviors may contribute to the problem. A husband reading this booklet will learn how to effectively communicate with his wife about a sensitive topic, in a way that facilitates positive interaction and behavior change. Also, resources (books and websites) are recommended for husbands who would like to learn more information about the topics covered in the booklet.

Readability is another strength of this resource. The benefit of reading the booklet may not be directly apparent to husbands; therefore, steps were taken to increase the likelihood that a husband would read and apply the information provided. The author attempted to make the booklet visually attractive by including traditionally-masculine colors and pictures illustrating concepts discussed in the booklet. The tone is non-threatening and enthusiastic. Sample scripts, problem solving exercises, and questionnaires are included to make the booklet more interesting and relevant to real life. The scripts, specifically, may be effective because husbands may be more willing to talk to their wives about these topics with an expert giving them templates for the discussion.

Lastly, gender communication and learning preferences were considered when developing the resource. For example, men tend to use deductive reasoning (understanding a general principle about something and then applying it to individual

cases; Hodgins, 2010) when learning and problem solving, so the guidelines given in the booklet were followed by examples to help the reader learn the new concepts presented. Men also tend to be visual learners (Hodgins, 2010), so the booklet includes pictures and illustrations, along with the text, to help increase the likelihood of retention of the information. Another consideration in the construction of the resource was that men often view relationships as hierarchical and providing help secures their position as equal or superior to another person (Tannen, 2007). Being helpful to your wife is a central theme throughout the booklet and was emphasized to increase a husband's desire to read about and use the tools provided. If a man feels that he is benefiting his position in his marriage by reading this booklet then, in general, he is more likely to do so. Men tend to want to solve problems, and while a husband may not be able to solve his wife's weight loss problem, this booklet provides opportunities for him to solve support and communication problems related to her weight loss goal.

Limitations of the Resource

Along with multiple strengths of this resource, there are limitations. The resource has not undergone empirical testing to evaluate its usefulness and is not ready for dissemination. The resource was created to help husbands support their wives' weight loss efforts based on a review of research on the topic; however, a formal evaluation would be a necessary step in validating the resource as a useful tool in weight loss. A plan for evaluating the resource is discussed in the next section.

A challenge in writing this resource was maintaining a balance between not sounding patronizing to women while appealing to the male desire to gain and not lose hierarchical positioning in a relationship. The information provided in this booklet is not

and applies the strategies discussed indirectly benefits by having a healthier and happier wife. Since at first glance the husband might not read a booklet about helping his wife lose weight, because he does not immediately see a benefit to himself, the author attempted to make the booklet more interesting by appealing to a man's desire to help others. Helping others leads a man to feel like he is in the one-up position in the relationship (Tannen, 2007). The author tried to appeal to men while not demeaning women or suggesting that women were of a lower social status than men, however some women who read the booklet may feel that there are slightly patronizing undertones.

Lastly, the resource was created for, and will most likely only benefit, well-intentioned husbands who may not know that their wives could use their support and/or do not know how to support their wives' weight loss efforts. Husbands who are consciously withholding support from their wives probably would not read this resource, and the couple would need more intervention than reading and applying strategies contained in this booklet. Regardless of a husband's intent, the booklet suggests marital counseling for problems that are beyond the scope of the psycho-education provided in this resource.

Plans for Future Evaluation, Revision, and Dissemination

Beyond the scope of this dissertation, a formal evaluation of this resource would be an important next step. A first step for evaluation would be to conduct focus groups with husbands and wives to discuss the usefulness of the resource. Participants would be asked to evaluate the content and format of the booklet and how much the information provided applies to them and their spouse. Husbands and wives would be interviewed

separately to gain more candid responses. Male participants would be asked about the aesthetic components of booklet and if it is designed in a way that makes them want to read the resource. Feedback from the participants would then be incorporated into a revised version of the booklet.

The next phase of evaluation of the booklet would be to conduct an empirical study to see if the use of the booklet by husbands resulted in wives being more successful at attaining weight management goals, when compared to women whose husbands did not use the booklet. The researcher would conduct a study with couples in which the wife is attempting to lose weight. The couples could be recruited by posting/distributing fliers at weight loss organizations and athletic clubs, as permitted. To participate in the study, wives would need to have a body mass index between 25 and 39 and no functional impairments that would prevent them from being able to participate in moderate physical activities such as walking for 30 minutes, riding a stationary bike or swimming. Husbands would need to be willing to actively participate in the study. The researcher would control for pre-intervention marital satisfaction to ensure that couples who are dissatisfied with their marriages are not included in the study. These couples would be excluded because the level of conflict and discord in their marriages might make the guidelines discussed in the booklet difficult to implement. Participants' levels of marital satisfaction would be assessed through a questionnaire administered prior to their acceptance to the study.

Participant couples would then be randomly assigned to either an experimental or control group. Husbands in group A (experimental group) would receive the booklet *My Wife Wants to Lose Weight: How Can I Help?* and be instructed to read the booklet and

apply the information that is appropriate to or works for their relationship. Husbands in group B (control group) would receive no instruction about supporting their wives; instead they would receive a booklet with information about weight loss principles, such as nutrition and exercise. The husbands in both groups will be administered an online questionnaire about the information in the booklets in order to ensure that they have read it. Couples in which the husband showed little knowledge of the booklet would be excluded from the analysis.

The BMI of wives in both groups would be assessed at three months, six months, one year, and five years to evaluate if there was a significant difference between the wives' weight loss and weight loss maintenance between group A and group B. If wives in the experimental group lost significantly more weight than wives whose husbands did not receive the booklet *My Wife Wants to Lose Weight: How Can I Help?*, then steps could be taken to replicate the study with different samples, with the goal of having the booklet recognized as part of evidence-based practice with overweight or obese married women. Qualitative measures can be developed for evaluating the strengths and weaknesses of the booklet and increasing knowledge of marital dynamics and weight loss success.

While the booklet should only be distributed after a formal evaluation has taken place, once the booklet is ready for dissemination it could be distributed through weight loss organizations, weight loss support groups, and/or therapists who work with couples where the wife is attempting to lose weight. The author would contact weight loss support groups and organizations to offer the booklet as an adjunct to the weight loss treatment they provide. The booklet could also be disseminated through the internet. The

author could build a website that includes a copy of the booklet with links to resources (books, relevant articles, and organizations) that might be helpful. The website could include a message board for husbands and wives to discuss challenges and successes they have experienced with spousal support in weight loss. In other words, people can receive social support while they support their spouse.

As designed, the booklet targets heterosexual married couples. New versions of the booklet can be created for cohabitating (unmarried) and lesbian couples. Another goal would be to tailor the booklet for different categories of diversity, such as culture or age group of the couple.

Conclusion

Obesity is a significant health problem in our modern society and millions of people have tried to lose weight and failed. Researchers and the weight loss industry are always looking for new and innovative ways to treat this persistent problem. It is hoped that the resource developed by this author will be a helpful tool for increasing a woman's likelihood of losing weight and maintaining a healthy weight.

REFERENCES

- Alexander, G., M., Wilcox, T., & Woods, R. (2009). Sex differences in infants' visual interest in toys. *Archives of Sexual Behavior*, *38*, 427-433. doi:10.1007/s10508 -008-9430-1
- American Heritage Medical Dictionary. (2008). Boston, MA: Houghton Mifflin.
- Aneshensel, C. S., Frerichs, R. R., & Huba, G. J. (1984). Depression and physical illness:

 A multiwave, nonrecursive causal model. *Journal of Health and Social Behavior*,

 25, 350-371. doi:10.2307/2136376
- Anonymous (2001). Obesity epidemic in exercise-deprived societies. *Journal of Environmental Health*, 63(9), 37-38. Retrieved from http://findarticles.com/p/articles/mi_hb6679/is_9_63/ai_n28839325/
- Anzman, S.L., Rollins, B.Y., & Birch, L.L. (2010). Parental influence on children's early eating environments and obesity risk: Implications for prevention. *International Journal of Obesity*, *34*, 1116-1124. doi:10.1038/ijo.2010.43
- Appelhans, B. M., Whited, M. C., Schneider, K. L., Oleski, J., & Pagoto, S. L. (2011).

 Response style and vulnerability to anger-induced eating in obese adults. *Eating Behaviors*, 12, 9-14. doi:10.1016/j.eatbeh.2010.08.009
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology and Health, 13,* 623-649. doi:10.1080/08870449808407442
- Barbarin, O. A., & Tirado, M. C. (1984). Family involvement and successful treatment of obesity: A review. *Family Systems Medicine*, 2(1), 37-45. doi:10.1037/h0091646
- Barbarin, O. A., & Tirado, M. C. (1985). Enmeshment, family process, and successful treatment of obesity. *Family Relations*, *34*(1), 115-121. doi:10.2307/583764

- Beck, J. (2011). I think, therefore I eat. *Psychotherapy Networker*, 1206, 31-54. Retrieved from http://www.psychotherapynetworker.org/community/1206-i-think-therefore -i-eat
- Benyamini, Y., & Raz, O. (2007). "I can tell you if I'll really lose all that weight":

 Dispositional and situated optimism as predictors of weight loss following a
 group intervention. *Journal of Applied Social Psychology, 37*(4), 844-861.

 doi:10.1111/j.1559-1816.2007.00189.x
- Beverly, E. A., Miller, C. K., & Wray, L. A. (2008). Spousal support and food-related behavior change in middle-aged and older adults living with type 2 diabetes.

 Health Education & Behavior, 35(5), 707-720. doi:10.1177/1090198107299787
- Black, D. R., & Lantz, C. E. (1984). Spouse involvement and a possible long-term follow-up trap in weight loss. *Behaviour Research and Therapy*, 22(5), 557-562. doi:10.1016/0005-7967(84)90059-7
- Black, D. R., & Threlfall, W. E. (1989). Partner weight status and subject weight loss: Implications for cost-effective programs and public health. *Addictive Behaviors*, 14(3), 279-289. doi:10.1016/0306-4603(89)90059-2
- Blackburn, G. L. (2002). Weight loss advertizing: An analysis of current trends.

 Introduction. *Staff report from Federal Trade Commission*. Retrieved from http://www.ftc.gov/bcp/reports/weightloss.pdf
- Blair, A. J., Lewis, V. J., & Booth, D. A. (1990). Does emotional eating interfere with success in attempts at weight control? *Appetite*, *15*, 151-157. doi:10.1016/0195-6663(90)90047-C

- Blair, S. N. (2003). Special issue on obesity, lifestyle, and weight management. *Obesity Research*, 11, 1s-2s. doi:10.1038/oby.2003.218
- Bren, L. (2002). *Losing weight: Start by counting calories*. Retrieved from http://www.fda.gov/fdac/features/2002/102_fat.html
- Brown, J. H., & Christensen, D. N. (1999). Family therapy: Theory and practice. Pacific Grove, CA: Brooks/Cole.
- Brownell, K. D., Heckerman, C. L., Westlake, R. J., Hayes, S. C. & Monti, P. M. (1978).

 The effect of couples training and partner co-operativeness in the behavioral treatment of obesity. *Behaviour Research and Therapy*, *16*, 323-333. doi:10.1016/0005-7967(78)90002-5
- Buchanan, W. L. (1988). Effects on weight loss and marital interaction by involving the spouse in a behavioral weight reduction program. *Dissertation Abstracts International*, 48(12-B), 3674.
- Burns, V. E., Carroll, D., Ring, C., Harrison, L. K., & Drayson, M. (2002). Stress, coping, and hepatitis b antibody status. *Psychosomatic Medicine*, 64, 287-293. doi:10.1097/01.PSY.0000038936.67401.28
- Canetti, L., Berry, E. M., & Elizur, Y. (2009). Psychosocial preditors of weight loss and psychological adjustment following bariatric surgery and a weight-loss program:

 The mediating role of emotional eating. *International Journal of Eating Disorders*, 42, 109-117. doi:10.1002/eat.20592
- Caprio, S., Daniels, S. R., Drewnowski, A., Kaufman, F. R., Palinkas, L. A., Rosenbloom, A. L., & Schwimmer, J. B. (2008). Influence of race, ethnicity, and

- culture on childhood obesity: Implications for prevention and treatment. *Diabetes*Care, 31(11), 2211-2221. doi:10.2337/dc08-9024
- Centers for Disease Control and Prevention (2007a). *Obesity among adults in the United States: No statistically significant change since 2003-2004*. Data Brief, 1, 8.

 Retrieved from http://www.cdc.gov/nchs/pressroom/07newsreleases/obesity.htm
- Centers for Disease Control and Prevention (2007b). *Prevalence of overweight and obesity among adults: United States*, 2003-2004. Retrieved from http://www.cdc..gov/nchs/products/pubs/pubd/hestats/overweight/overwght adult 03.htm
- Centers for Disease Control and Prevention (2008a). *Defining overweight and obesity*.

 Retrieved from http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm
- Centers for Disease Control and Prevention (2008b). *Obesity and Overweight:*Contributing Factors. Retrieved from http://www.cdc.gov/obesity/causes
 /index.html
- Centers for Disease Control and Prevention (2008c). *Overweight and obesity: Childhood overweight*. Retrieved from http://www.cdc.gov/nccdphp/dnpa/obesity /childhood/index.htm
- Centers for Disease Control and Prevention (2008d). *Overweight and obesity: Health consequences*. Retrieved from http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm
- Centers for Disease Control and Prevention (2008e). QuickStats: Percentage of adults aged ≥20 years who said they tried to lose weight during the preceding 12 months, by age group and sex—national health and nutrition examination survey,

- United States, 2005-2006. *Morbidity and Mortality Weekly Report, 57*(42), 1155. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5742a4.htm
- Centers for Disease Control and Prevention (2009). Differences in prevalence of obesity among black, white, and Hispanic adults---United States, 2006-2008. *Morbidity and Mortality Weekly Report*, 58(27), 740-744. Retrieved from http://www.cdc .gov/mmwr/preview/mmwrhtml/mm5827a2.htm
- Centers for Disease Control and Prevention (2010). *Healthy weight*. Retrieved from http://www.cdc.gov/healthyweight/
- Cleland, R. L., Gross, W. C., Koss, L. D., Daynard, M., & Muoio, K. M. (2002). Weight loss advertising: An analysis of current trends. *Staff Report from Federal Trade Commission*. Retrieved from http://www.ftc.gov/bcp/reports/weightloss.pdf
- Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychology*, 7, 269-297. Retrieved from http://www.psy.cmu.edu/~scohen/schealthpsy88.pdf
- Colley, A., Todd, Z., Bland, M., Holmes, M., Khanom, N., & Pike, H. (2004). Style and content in e-mails and letters to male and female friends. *Journal of Language* and *Social Psychology*, 23(3), 369-378. doi:10.1177/0261927X04266812
- Collier, S. D. (1993). Individuation in the marital relationship and weight-loss for women participants in a weight treatment program. *Dissertation Abstracts International*, 54(5-A), 1675.
- Consumer Reports (2009). *Dieting on a budget*. Retrieved from http://www.consumerreports.org/health/healthy-living/diet-nutrition/diets-dieting/dieting-on-a-budget/overview/dieting-on-a-budget-ov.htm

- Cunningham, M. S. (1986). Self-efficacy, outcome and spouse-efficacy expectancies and weight loss. *Dissertation Abstracts International*, 47(3-B), 1268.
- Davis, E. M., Clark, J. M., Carrese, J. A., Gary, T. L., & Cooper, L. A. (2005). Racial and socioeconomic differences in the weight-loss experiences of obese women.
 American Journal of Public Health, 95, 1539-1543. doi:10.2105/AJPH.2004
 .047050
- De Panfilis, C., Torre, S., Cero, S., Salvatore, P., Dall Agio, E., Marchesi, C., . . . Maggini, C. (2008). Personality and attrition from behavioral weight-loss treatment for obesity. *General Hospital Psychiatry*, *30*, 515-520. doi:10.1016/j.genhosppsych.2008.06.003
- Diamant, A. L., Babey, M. J., Jones, M., & Brown, E. R. (2009). *Teen dietary habits*related to those of parents [Policy brief]. Retrieved from UCLA Center for Health

 Policy Research website: http://www.healthpolicy.ucla.edu
- Dubbert, P. M., & Wilson, G. T. (1984). Goal-setting and spouse involvement in the treatment of obesity. *Behaviour Research and Therapy*, 22(3), 227-242. doi:10.1016/0005-7967(84)90003-2
- Duncan, T. E., & McAuley, E. (1993). Social support and efficacy cognitions in exercise adherence: A latent growth curve analysis. *Journal of Behavioral Medicine*, *16*(2), 199-218. doi:10.1007/BF00844893
- Elfhag, K., Rossner, S., Lindgren, T., Andersson, I., & Carlsson, A. M. (2004).

 Rorschach personality predictors of weight loss with behavior modification in obesity treatment. *Journal of Personality Assessment*, 83(3) 293-305. doi:10

 .1207/s15327752jpa8303_11

- Elstad, J. I. (1996). Inequalities in health related to women's marital, parental, and employment status: A comparison between the early 70s and the late 80s, Norway. *Social Science & Medicine*, 42, 75-89. doi:10.1016/0277-9536 (95)00078-X
- Esposito, L., Fisher, J. O., Mennella, J. A., Hoelscher, D. M., & Huang, T. T. (2009).

 Developmental perspectives on nutrition and obesity from gestation to adolescence. *Preventing Chronic Disease*, 6(3), 1-11. Retrieved from http://www.cdc.gov/pcd/issues/2009/july/09_0014.htm
- Ewing, J. A. (1987). Spouse involvement in a behavioral weight loss program.

 *Dissertation Abstracts International, 47(8-B), 3517-3518.
- Farrel, B., & Farrel, P. (2001). *Men are like waffles, women are like spaghetti*. Eugene, OR: Harvest House.
- Foreyt, J. P., & Goodrick, G. K. (1993). Evidence for success of behavior modification in weight loss and control. *Annals of Internal Medicine*, 119(7), 698-701. Retrieved from http://www.baetacorp.com/pdf/Evidence_for_Success_of_Behavior_Modification.pdf
- French, S. A., Story, M., & Jeffery, R. W. (2001). Environmental influences on eating and physical activity. *Annual Review of Public Health*, 22,309-335. Retrieved from http://www.uic.edu/classes/psych/Health/Readings/French,%20obesity%20 -%20environmental,%20AnnRevPubHth,%202001.pdf
- Ganley, R. M. (1992). Family patterns in obesity: With consideration of emotional eating and restraint. *Family Systems Medicine*, *10*(2), 181-199. doi:10.1037/h0089244

- Geliebter, A., & Aversa, A. (2003). Emotional eating in overweight, normal weight, and underweight individuals. *Eating Behaviors*, *3*, 341-347. doi:10.1016/S1471 0153(02)00100-9
- Goldman, N., Korenman, S., & Weinstein, R. (1995). Marital status and health among the elderly. *Social Science & Medicine*, 40, 1717-1730. doi:10.1016/0277

 -9536(94)00281-W
- Goodwin, J. S., Hunt, W. C., Key, C. R., & Samet, J. M. (1987). The effect of marital status on stage, treatment, and survival of cancer patients. *Journal of the American Medical Association*, 258, 3125-3130. doi:10.1001/jama.1987.03400210067027
- Gorin, A., Phelan, S., Tate, D., Sherwood, N., Jeffery, R., & Wing, R. (2005). Involving support partners in obesity treatment. *Journal of Consulting and Clinical Psychology*, 73(2), 341-343. doi:10.1037/0022-006X.73.2.341
- Gottlieb, B. H. (1987). Marshalling social support for medical patients and their families. *Canadian Psychology*, 28(3), 201-217. doi:10.1037/h0079908
- Gottman, J. (1994). Why marriages succeed or fail. New York, NY: Simon & Schuster.
- Gray, J. (1992). Men are from Mars, women are from Venus. New York, NY: HarperCollins.
- Green, A. R., Larkin, M., & Sullivan, V. (2009). Oh stuff it! The experience and explanation of diet failure. *Journal of Health Psychology*, 14(7), 997-1008. doi:10.1177/1359105309342293

- Hafner, R. J. (1991). Morbid obesity: Effects on the marital system of weight loss after gastric restriction. *Psychotherapy and Psychosomatics*, *56*(3), 162-166. doi:10 .1159/000288550
- Hamilton, N., & Zimmerman, R. (1985). Weight control: The interaction of marital power and weight loss success. *Journal of Social Service Research*, 8(3), 51-64. doi:10.1300/J079v08n03_04
- Harkaway, J. E. (2000). Obesity and systems research: The complexity of studying complexities. *Families, Systems & Health, 18*(1), 55-59. doi:10.1037/h0091877
- Hatfield, H. (2011). *Emotional eating: Feeding your feelings*. Retrieved from http://www.webmd.com/diet/features/emotional-eating-feeding-your-feelings
- Heinberg, L. J., & Thompson, J. K. (2009). *Obesity in youth: Causes, consequences, and cures*. Washington, DC: American Psychological Association.
- Hellmich, N. (2009). *Yo-yo dieting can be the toughest bounce of all*. Retrieved from http://www.usatoday.com/news/health/weightloss/2009-05-26-yo-yo-diet_N.htm
- Hodgins, D. (2010). *Male and female differences*. Retrieved from http://languagelog.ldc.upenn.edu/myl//llog/Hodgins1.pdf
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health.

 *Science, 241, 540-545. Retrieved from http://www.uic.edu/classes/psych/Health

 *[Readings/House,%20Social%20relationships-Health,%20Science,%201988.pdf]
- Jeffery, R. W. (1996). Does weight cycling present a health risk. *American Journal of Clinical Nutrition*, 63, 452S-455S. Retrieved from http://www.ajcn.org/content/63/3/452S.full.pdf

- Jeffery, R. W., Adlis, S. A., & Forster, J. L. (1991). Prevalence of dieting among working men and women: The healthy worker project. *Health Psychology*, *10*, 274-281. doi:10.1037/0278-6133.10.4.274
- Jeffery, R. W., Drewnowski, A., Epstein, L. H., Stunkard, A. J., Wilson, G. T., Wing, R. R., & Hill, D. R. (2000). Long-term maintenance of weight loss: Current status.

 Health Psychology, 19 (1), 5-16. doi:10.1037/0278-6133.19.Suppl1.5
- Kagan, D. L. (1984). Effect of spouse behavior and marital interaction on weight loss and maintenance. *Dissertation Abstracts International*, 44(10-B), 3199.
- Kiecolt-Glaser, J. K., Garner, W., Speicher, C., Penn, G. M., Holliday, J., & Glaser, R. (1984). Psychosocial modifiers of immunocompetence in medical students. *Pychosomatic Medicine*, 46(1), 7-14. Retrieved from http://www.

 psychosomaticmedicine.org/content/46/1/7.full.pdf+html
- Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., & Glaser, R. (2002). Emotions, morbidity, and mortality: New perspectives from psychoneuroimmunology. *Annual Review*, 53, 83-107. doi:10.1146/annurev.psych.53.100901.135217
- Klein, A. L. (1993). Relationships of spousal behaviors and self-efficacy to weight loss maintenance. *Dissertation Abstracts International*, *53*(11-B), 6040.
- Konttinen, H., Mannisto, S., Sarlio-Lahteenkorva, Silventoinen, K., & Haukkala, A. (2010). Emotional eating, depressive symptoms and self-reported food consumption. A population-based study. *Appetite*, *54*(3), 473-479. doi:10.1016/j .appet.2010.01.014
- Kotler, P., & Wingard, D. L. (1989). The effect of occupational, marital and parental roles on mortality: The Alameda county study. *American Journal of Public*

- Health, 79, 607-612. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1349503/pdf/amjph00231-0063.pdf
- Kruger, J. (2009, September/October). Habits associated with successful weight loss and maintenance. *Review of Endocrinology*, 17-22. Retrieved from http://www.reviewofendo.com/articles/0909/0909_03.pdf
- Larsen, J. K., Geenen, R., Maas, C., de Wit, P., van Antwerpen, T., Brand, N., & van Ramshorst, B. (2004). Personality as a predictor of weight loss maintenance after surgery for morbid obesity. *Obesity Research*, *12*, 1828-1834. doi:10.1038/oby .2004.227
- Lawrence, J. (2004). *How to deal with diet saboteurs*. Retrieved from http://medicinenet .com/script/main/art.asp?articlekey=52366
- Lewis, M. A., & Rook, K. S. (1999). Social control in personal relationships: Impact on health behaviors and psychological distress. *Health Psychology*, *18*(1), 63-71. doi:10.1037/0278-6133.18.1.63
- Logic, M., Okun, M. A., & Pugliese, J. A. (2009). Expanding the meditational model of the effects of health-related social control. *Journal of Applied Social Psychology*, 39(6), 1373-1396. doi:10.1111/j.1559-1816.2009.00486.x
- Marcoux, B. C., Trenkner, L. L., & Rosenstock, I. M. (1990). Social networks and social support in weight loss. *Patient Education and Counseling*, *15*, 229-238.doi:10 .1016/0738-3991(90)90098-6
- Markey, C. N., Markey, P. M., & Birch, L. L. (2001). Interpersonal predictors of dieting practices among married couples. *Journal of Family Psychology*, *15*, 464-475. doi:10.1037/0893-3200.15.3.464

- Marshall, S. J., Jones, D. A., Ainsworth, B. E., Reis, J. P., Levy, S. S., & Macera, C. A. (2007). Race/ethnicity, social class, and leisure-time physical inactivity. *Medicine and Science in Sports and Exercise*, 39(1), 44-51. Retrieved from http://www.medscape.com/viewarticle/551027
- Mayo Clinic Staff (2009). Weight loss: Six strategies for success. Retrieved from http://www.mayoclinic.com/health/weight-loss/hq01625
- Mayo Clinic Staff (2011). Weight-loss help: Gain control of emotional eating. Retrieved from http://www.mayoclinic.com/health/weight-loss/MH00025
- McDaniel, S. H., Hepworth, J., & Doherty, W. J. (1992). *Medical family therapy*. New York, NY: HarperCollins.
- McLean, N., Griffin, S., Toney, K., & Hardeman, W. (2003). Family involvement in weight control, weight maintenance and weight-loss interventions: A systemic review of randomized trials. *International Journal of Obesity*, 27, 987-1005. doi:10.1038/sj.ijo.002383
- McReynolds, J. L., & Rosen, E. K. (2004). Importance of physical activity, nutrition, and social support for optimal aging. *Clinical Nursing Specialist*, 18(4), 200-206.

 Retrieved from http://www.medscape.com/viewarticle/484344
- Miller-Kovach, K. (2007). She loses, he loses: The truth about men, women and weight loss. Hoboken, NJ: John Wiley & Sons.
- Murphy, J. K. (1982). The long-term effects of spouse involvement upon weight loss maintenance. *Behavior Therapy*, *13*(5), 643-650. doi:10.1016/S00057894 (82)80024-5

- National Center for Chronic Disease Prevention and Health Promotion Division of Nutrition and Physical Activity (2006). *Do increased portion sizes affect how much we eat? Research to practice series, No.* 2. Retrieved from http://www.cdc.gov/nccdphp/dnpa/nutrition/pdf/portion_size_research.pdf
- National Diabetes Information Clearinghouse (2011). *National diabetes statistics*, 2011.

 Retrieved from http://diabetes.niddk.nih.gov/dm/pubs/statistics/
- National Weight Control Registry (2008). *The national weight control registry*. Retrieved from http://www.nwcr.ws/default.htm
- Office of the Surgeon General (2008). *Overweight and obesity: At a glance*. Retrieved from http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_glance.htm
- Okun, M. A., Huff, B. P., August, K. J., & Rook, K. A. (2007). Testing hypotheses distilled from four models of the effects of health-related social control. *Basic and Applied Social Psychology*, *29*(2), 185-193. Retrieved from http://web.ebscohost .com.lib.pepperdine.edu/ehost/pdfviewer/pdfviewer?sid=6a04ab8f-d5f3-4430 -8b39-62c303835c59%40sessionmgr12&vid=21&hid=9
- O'Neil, P. M. (1979). Effects of sex of subject and spouse involvement on weight loss in a behavioral treatment program: A retrospective investigation. *Dissertation Abstracts International*, 4(2), 167-177.
- Pearce, J. W., LeBow, M. D., & Orchard, J. (1981). Role of spouse involvement in the behavioral treatment of overweight women. *Journal of Consulting and Clinical Psychology*, 49(2), 236-244. doi:10.1037/0022-006X.49.2.236

- Pearson, N., Biddle, S. J., & Gorely, T. (2009). Family correlates of breakfast consumption among children and adolescents. A systematic review. *Appetite*, 52(1), 1-7. doi:10.1016/j.appet.2008.08.2006
- Perri, M. G. (1998). The maintenance of treatment effects in long-term management of obesity. *Clinical Psychology: Science and Practice* 5(4), 526-543. doi:10.1111/j.1468-2850.1998.tb00172.x
- Perri, M. G., McAdoo, W. G., McAllister, D. A., Lauer, J. B., Jordan, R. C., Yancey, D.
 Z., & Nezu, A. M. (1987). Effects of peer support and therapist contact on long-term weight loss. *Journal of Consulting and Clinical Psychology*, 55(4), 615-617.
 doi:10.1037/0022-006X.55.4.615
- Perri, M. G., McAdoo, W. G., McAllister, D. A., Lauer, J. B., & Yancey, D. Z. (1986).

 Enhancing the efficacy of behavior therapy for obesity: Effects of aerobic exercise and a multicomponent maintenance program. *Journal of Consulting and Clinical Psychology*, *54*(5), 670-675. doi:10.1037/0022-006X.54.5.670
- Perri, M. G., McAdoo, W. G., Spevak, P. A., & Newlin, D. B. (1984). Effect of a multicomponent program of long-term weight loss. *Journal of Consulting and Clinical Psychology*, 52(3), 480-481. doi:10.1037/0022-006X.52.3.480
- Perri, M. G., McAllister, D. A., Gange, J. J., Jordan, R. C., McAdoo, W. G., & Nezu, A. M. (1988). Effects of four maintenance programs on the long-term management of obesity. *Journal of Consulting and Clinical Psychology*, 56(4), 529-534. doi:10.1037/0022-006X.56.4.529
- Perri, M. G., Nezu, A. M., McKelvey, W. F., Shermer, R. L., Renjilian, D. A., & Viegener, B. J. (2001). Relapse prevention training and problem-solving therapy

- in the long-term management of obesity. *Journal of Consulting and Clinical Psychology*, 69(4), 722-726. doi:10.1037/0022-006X.69.4.722
- Pierce, G. P., Sarason, B. R., Sarason, I. G., Joseph, H. J., & Henderson, C. A. (1996).

 Handbook of social support and the family. New York, NY: Plenum Press.
- Poston, W. S. C., II, Ericsson, M., Linder, J., Nilsson, T., Goodrick, G. K., & Foreyt, J. P. (1999). Personality and the prediction of weight loss and relapse in the treatment of obesity. *International Journal of Eating Disorders*, 25, 301-309. doi:10.1002 /(SICI)1098-108X(199904)25:3<301::AID-EAT8>3.0.CO;2-P
- Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research, and Practice, 19*, 276-288. doi:10.1037/h0088437
- Ren, X. S. (1997). Marital status and quality of relationships: The impact on health perception. *Social Science & Medicine*, 44, 241-249. doi:10.1016/S0277-9536 (96)00158-X
- Renjilian, D. A., Perri, M. G., Nezu, A. M., McKelvey, W. F., Shermer, R. L., & Anton, S. D. (2001). Individual versus group therapy for obesity: Effects of matching participants to their treatment preferences. *Journal of Consulting and Clinical Psychology*, 69(4), 717-721. doi:10:1037/0022-006X.69.4.717
- Resnick, B. (2001). A prediction model of aerobic exercise in older adults living in a continuing-care retirement community. *Journal of Aging and Health*, *13*, 287-310. doi:10.1177/089826430101300207

- Ross, C. E., Mirowsky, J., & Goldsteen, K. (1990). The impact of the family on health:

 The decade in review. *Journal of Marriage and the Family*, *52*, 1059-1078.

 Retrieved from http://www.jstor.org/stable/353319
- Schlosser, E. (2001). Fast food nation. Boston, MA: Houghton Mifflin.
- Schroder, K. E., Schwarzer, R., & Endler, N. S. (1997). Predicting cardiac patients' quality of life from the characteristics of their spouses. *Journal of Health Psychology*, 2(2), 231-244. Retrieved from http://userpage.fuberlin.de/~gesund/publicat/spouses8.htm
- Shaffer, D. R. (1994). Sex differences and sex-role development. In *Social and personality development* (pp. 279-324). Pacific Grove, CA: Brooks/Cole.
- Slusky, A. B. (1994). A component analysis of spousal support in the treatment of obesity: Effects of husband's weight on a wife's weight loss and maintenance. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 55(3), 1195.
- Sobal, J., Rauschenbach, B., & Frongillo, E. A. (2003). Marital status changes and body weight changes: a US longitudinal analysis. *Social Science & Medicine*, *56*, 1543-1555. doi:10.1016/S0277-9536(02)00155-7
- Spurlock, M. (Producer), & Spurlock, M. (Director). (2003). *Super size me* [Motion picture]. United States of America: Samuel Goldwyn Films.
- Steenhuis, I. H., & Vermeer, W. M. (2009). Portion size: review and framework for intervention. *International Journal of Behavioral Nutrition and Physical Activity*, 6, 58. doi:10.1186/1479-5868-6-58

Sullivan, S., Cloninger, C. R., Przybeck, T. R., & Klein, S. (2007). Personality characteristics in obesity and relationship with successful weight loss.

*International Journal of Obesity, 31(4), 669-674. doi:10.1038/sj.ijo.0803464

Tannen, D. (2007). You just don't understand. New York, NY: HarperCollins.

- Temkin-Greener, H., Bajorska, A., Peterson, D. P., Kunitz, S. J., Gross, D., Williams, F., & Mukamel, D. B. (2004). Social support and risk-adjusted mortality in a frail older population. *Medical Care*, 42(8), 779. doi:10.1097/01.mlr.0000132397
 - .49094.b3
- The, N., & Gordon-Larsen, P. (2009). Entry into romantic partnerships is associated with obesity. *Obesity*, *17*(7), 1441-1447. doi:10.1038/oby.2009.97
- Thomas, S. L., Hyde, J., Karunarantne, A., Kausman, R., & Komesaroff, P. A. (2008).

 "They all work...when you stick to them": A qualitative investigation of dieting, weight loss, and physical exercise, in obese individuals. *Nutrition Journal*, 7, 1-7. doi:10.1186/1475-2891-7-34
- Tillotson, J. E. (2004). America's obesity: Conflicting public policies, industrial economic development, and unintended human consequences. *Annual Review of Nutrition*, 24, 617-643. doi:10.1146/annurev.nutr.24.012003.132434
- Tucker, J. S., Friedman, H. S., Wingard, D. L., & Schwartz, J. E. (1996). Marital history at midlife as a predictor of longevity: Alternative explanations to the protective effect of marriage. *Health Psychology*, *15*, 94-101. doi:10.1037/0278-6133.15
- Umberson, D. (1992). Gender, marital status and the social control of health behavior. Social Science & Medicine, 34, 907-917. doi:10.1016/0277-9536(92)90259-S

- van Dam, H. A., van der Horst, F. G., Knoops, L., Ryckman, R. M., Crebolder, H. F., & van den Borne, B. H. (2005). Social support in diabetes: A systemic review of controlled intervention studies. *Patient Education and Counseling*, *59*, 1-12. doi:10.1016/j.pec.2004.11.001
- Verbrugge, L. M. (1979). Marital status and health. *Journal of Marriage and the Family*, 41(2), 267-285. doi:10.2307/351696
- Verbrugge, L. M. (1983). Multiple roles and physical health of women and men. *Journal* of Health and Social Behavior, 24, 16-30. doi:10.2307/2136300
- Wang, X., You, T., Lenchik, L., & Nicklas, B. J. (2009). Resting energy expenditure changes with weight loss: Racial differences. *Obesity*, *18*, 86-91. doi:10.1038/oby.2009.163
- Weight-control Information Network (2011a). Do you know the health risks of being overweight? Retrieved from http://win.niddk.nih.gov/Publications/health risks.htm
- Weight-control Information Network (2011b). *Weight cycling*. Retrieved from http://win.niddk.nih.gov/publications/cycling.htm#isweight
- Weight Loss Maintenance Collaborative Research Group. (2008). Comparisons of strategies for sustaining weight loss. *Journal of the American Medical Association*, 299(10), 1139-1148. doi:10.1001/jama.299.10.1139
- Weisz, G., & Bucher, B. (1980). Involving husbands in treatment of obesity-effects on weight loss, depression, and maintenance. *Behavior Therapy*, 11(5), 643-650. doi:10.1016/S0005-7894(80)80003-7

- Wickrama, K. A., Conger, R. D., & Lorenz, F. O. (1995). Work, marriage, lifestyle, and changes in men's physical health. *Journal of Behavioral Medicine*, 18(2), 97-111. doi:10.1007/BF01857863
- Wickrama, K. A., Conger, R. D., Lorenz, F. O., & Matthews, L. (1995). Role identity, role satisfaction, and perceived physical health. *Social Psychology Quarterly*, 58, 270-283. doi:10.2307/2787128
- Wickrama, K. A., Lorenz, F. O., Conger, R. D., & Elder, G. H. (1997). Marital quality and physical illness: A latent growth curve analysis. *Journal of Marriage and the Family*, 59, 143-155. doi:10.2307/353668
- Williams, B. E. (1984). Spouse involvement in the behavioral treatment of obesity: The effect on weight loss, and maintenance, and marital relationship. *Dissertation Abstracts International*, 44(9-B), 2911.
- Wing, R. R., & Jeffery, R. W. (1999). Benefits of recruiting participants with friends and increasing social support for weight loss and maintenance. *Journal of Consulting and Clinical Psychology*, 67(1), 132-138. doi:10.1037/0022-006X.67.1.132
- Wing, R. R., Marcus, M. D., Epstein, L. H., & Jawad, A. (1991). A "family-based" approach to the treatment of obese type II diabetic patients. *Journal of Consulting and Clinical Psychology*, 59(1), 156-162. doi:10.1037/0022-006X.59.1.156
- Wing, R. R., Tate, D. F., Gorin, A. A., Raynor, H. A., & Fava, J. L. (2006). A self-regulation program for maintenance of weight loss. *New England Journal of Medicine*, 355(15), 1563-1571. doi:10.1056/NEJMoa061883

- World Health Organization (2009). *Chronic diseases and their common risk factors*.

 Retrieved from http://www.who.int/chp/chronic_disease_report/media

 /Factsheet1.pdf
- Young, L. E., Cunningham, S. L., & Buist, D. S. (2005). Lone mothers are at higher risk for cardiovascular disease compared with partnered mothers. Data from the national health and nutrition examination survey III. *Health Care for Women International*, 26, 604-621. doi:10.1080/07399330591004845
- Zitter, R. E. (1980). Spouse involvement in a behavioral weight loss program.

 Dissertation Abstracts International, 40(12-B), 5838.

APPENDIX A

Literature Table

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Literature Table

Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Beverly, E. A., Miller, C. K., & Wray, L. A. (2008) Spousal support and food-related behavior change in middle-aged and older adults living with type 2 diabetes	"To determine how aspects of the spousal relationship translate into behavior changes, specifically adherence to a healthful diet" (p. 707).	Core themes discussed by focus group attendees regarding challenges to food-related behavior change were measured by co-moderator discussion and summary immediately after each group, with development of codes for relevant themes and coding of transcripts of each group.	30 couples with at least one person in the couple having diabetes. Mean age = 54 years and mean length of marriage 37.8 years.	Twelve 90-minute focus groups were conducted with persons with diabetes and spouses in separate groups. A structured discussion guide was used. Themes were identified through transcript review and coding.	1. Core themes related to dietary adherence were: Control over food and dietary competence, commitment to support, spousal communication and coping with diabetes. 2. Husbands with diabetes resented wives' control over food, while wives' with diabetes felt husbands were not supportive of dietary choices. 3. Couples with more communication reported more dietary adherence.	Analysis suggests that positive reinforcement (commitment to support, spousal communication, and coping with diabetes) and self-efficacy (control over food and self- efficacy) are important in dietary adherence.	This study gave insight into some of the challenges to dietary adherence within a marriage and how a spouse can be helpful. The differences between men and women and how they prefer to be supported are also discussed. However, the study is specific to people with diabetes.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
& Lantz C.E. (1984) Spouse involvement and a possible longterm followup trap in weight loss	"To determine if husband attendance at treatment sessions and participation in behavioral contracting would produce greater weight loss than two other levels of spouse involvement" (p. 558).	1. Weight loss (pounds lost) 2. Husband's level of involvement in treatment (Husband Contracting: attended every session with wife and signed behavioral contracts with information on how to support wife's attempt to lose weight. Husband Not Contracting: attended all meetings but did not sign contract or learn about ways to be supportive. Husband Absent: Husband did not attend sessions or sign contracts).	36 married women (23-53 years old). The participants' weights ranged from 11-88% overweight. Husbands had to be willing to attend sessions with his wife and provide support.	Participants attended weekly sessions for 10 weeks that taught 'altering eating habits' (3-weeks), 'increasing activity' (3-weeks) and combining the two (3-weeks). At each session the participants signed contracts stating they would enact what was learned. Husband's level of involvement varied based on the group he was assigned to.	1. Between the three groups, there was no significant difference from pre-treatment to post-treatment. 2. Between the post-treatment and one-year follow-up the Husband Absent group lost significantly more weight than the Husband Not Contracting group. 3. There was not a significant difference between the Husband Contracting group and either of the other groups during the same time period.	1. "Spouse involvement did not produce more dramatic or clinically significant weight losses" (p. 560). 2. Participants lost the most weight if their husband did not attend and they contract with a counselor. 3. However, other factors may be impacting the results (such as participation in other weight loss plans during the follow-up period).	In my opinion the authors' conclusion #2 is not supported by the data. There was not a significant difference between Husband Contracting group and the Husband Absent group at any point. This suggests that other factors may be impacting the significant difference between the Not Contracting and Absent groups found at the one year follow-up. Another problem with this study is the small sample size.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Black, D.R., & Threlfall, W.E. (1989) Partner weight status and subject weight loss: Implications for costeffective programs and public health	"The purpose of this study was to compare body changes of subjects with overweight partners and subjects with normal partners" (p. 280).	1. Pounds lost/percentage over weight (measured by researcher); 2. Weight of partner (group 1-normal weight partners & group 2-overweight partners).	8 men and 18 women, who were moderately obese. Age range 28-62; 17% to 60% overweight. Twenty-five were married. One participant was not married but lived with significant other.	"Partners were encouraged to assist subjects in losing weight but were neither required nor expected to lose weight. If partners wished to lose weight, they were told to follow the same verbal guidelines for weight reduction that were given to subjects during the first meeting" (p. 281).	1. Participants with normal weight partners lost significantly more weight than participants with overweight partners, at post-treatment and 3-month follow-up. 2. Participants lost significantly more weight than their partners, however all four groups lost weight.	1. "Weight status of partners might, therefore, be considered a blocking variable or covariate and body changes of both subjects and partners should be reported in couples studies to understand more fully the relationship between partner weight status and subject weight loss" (p. 287). 2. Couples programs may be a costeffective approach to weight-loss, as no additional resources are needed to serve the partner.	This study is important because it identifies another variable that is correlated with weight loss. Unfortunately, we do not know why participants with normal weight partners are more successful with weight loss. It is possible that an overweight spouse's habits make it more difficult for the participant to change their behaviors or that sabotage or other systemic factors are at play.

A	uthor/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
D. He C. W J., C. P. The cootra pa op in be 10	rownell, K. ceckerman, L., festlake, R. Hayes, S. , & Monti, M. (1978) The effect of ouples arining and artner co- perativeness the chavioral catment of pesity	"To evaluate the influence of spouse co-operativeness and couples training in the treatment of obesity" (p. 323).	Weight change (measured by researchers); Spouse participation (cooperative spouse with couples weight loss training, cooperative spouse but only participant attended treatment, non-co-operative spouse who refused to attend treatment). Assignment to one of three experimental conditions.	29 obese men and women. 10 males and 19 females. Participants were married, 15% or 15 lbs overweight, at least 21 years old, not taking medication which would influence weight, without medical problems contraindicating weight loss and not involved in other weight reduction program.	Participants attended weekly sessions of behavioral weight control for 1 ½ hrs for a 10-week treatment phase. Subsequent monthly sessions were held for a 6-month maintenance phase. Participants were weighed at each session. Spouses in the cooperative spouse with couples weight loss training attended treatment and were instructed to follow the same plan as the participants when in the participant's presence and both spouses were to monitor each other's weight loss behaviors.	1. No significant differences between groups immediately post treatment. 2. At 3 and 6 month maintenance assessments, subjects in the spouse training condition lost significantly more weight than subjects in the other two conditions, 30 lbs lost after 8 ½ months of treatment. In the absence of training, subjects with cooperative spouses did no better than subjects with non-cooperative spouses.	1. Findings suggest that spouse training many facilitate effect in weight reduction. 2. Spouse training may also promote long-term maintenance of weight loss.	A spouse that wants to be supportive may not be as effective as a spouse who has been trained in how to be supportive. Spousal support may not impact initial weight loss when someone decides to start a weight loss plan but may have the greatest effect in long-term maintenance.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Dubbert, P.M., & Wilson, G.T. (1984) Goal-setting and spouse involvement in the treatment of obesity	1. "To resolve the conflicting findings in the literature on the benefits of spouse involvement in treatment by examining cooperative marital behavior" (p. 239). 2. To compare amount of weight loss with proximal verses distal goal setting.	1. Weight (measured by a researcher, through the 6-month follow- up); 2. Marital Adjustment (Locke-Wallace Marital Adjustment Test, MAT); 3. Goal Setting: Proximal Goals (daily goals for calorie intake and expenditure), Distal Goals (weekly goals for calorie intake and expenditure).	48 women and 14 men, between 15 lbs and 100% overweight, married and cohabitating with their spouse. The participant's spouse was willing to attend at least eight sessions. Participants did not have any medical problems other than obesity.	Participants were randomly assigned to 1 of 4, 19-week treatments: Couples Weekly Goals, Couples Daily Goals, Individual Weekly Goals, Individual Daily Goals. All groups received information about nutrition, exercise, controlling eating, self-defeating cognitions, and asserting oneself to obtain support from significant others. Participants then received specific instruction based on assigned groups. Spouses in couples groups were instructed on ways to support spouses in losing weight. Participants given daily(Proximal) or wkly(Distal) calorie and exercise goals.	1. There was a significant increase in participants' marital satisfaction scores from pre-to post-treatment, which then decreased to approximately pretreatment levels by the 6-month follow-up. 2. There were no significant differences in weight loss between groups. 3. At 12-month follow-up higher pre-treatment MAS scores were correlated with weight regain.	1. It is "possible that non-involved spouses initiated equivalent cooperative behaviors without specific instructions" (p. 239).	1. All couples had MAS scores in the well-adjusted range. Well-adjusted couples may tend to be more supportive of spouses in general, leaving little room for a treatment effect. 2. It is difficult to know if participants in the non-participating spouse group were able to elicit the necessary support because of the education given about asserting oneself to obtain support. 3. Some of the support behaviors may have been aversive to the participant. 4. All supportive-partner studies have the same problem: All of the partners are willing to participate and provide support to the spouse. What about unwilling partners?

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Goodwin, J. S., Hunt, W. C., Key, C. R., & Samet, J. M. (1987) The effect of marital status on stage, treatment, and survival of cancer patients	This study examines the effects of marital status on the diagnosis, treatment, and survival of patients with cancer.	Marital status (single, divorced, or separated); Death (National death index or personal physician).	25,706 cancer patients newly diagnosed between 1969 and 1982.	Marital status was collected from cancer registry and compared with National Death Index or the report of the patient's physician.	1. Unmarried had poorer survival rates. 2. Unmarried more likely to be diagnosed at a distant stage of cancer. 3. Married more likely to be in treatment than nonmarried but there was still an effect for marriage (partialing out increased likelihood to seek treatment).	Results show a relationship between marital status and survival after diagnosis with cancer. The improved survival of married persons has at least three components. 1. Married persons tend to be diagnosed at an earlier stage of disease. 2. Married persons more frequently receive definitive or potentially curative treatments. 3. Even after controlling for stage at diagnosis and treatment, married people have better survival.	This study shows that marriage has a power beyond encouraging positive health behaviors (seeking diagnosis and treatment).

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Gorin, A., Phelan, S., Tate, D., Sherwood, N., Jeffery, R., & Wing, R. (2005) Involving support partners in obesity treatment	To identify "how many support partners it takes to optimize weight loss outcomes and whether partners need to lose weight themselves to be an effective form of support" (p. 341).	Weight loss (measured by researchers); Number of support partners brought to treatment; Weight loss of support partner.	109 overweight (14-32kg) individuals 25-50 yrs of age and 77 support partners (7-32kg overweight). 49% of participants brought support partners. The majority of the support partners were women. 17% were spouses and 13% were other family members.	Participants attended a behavioral weight loss program (focused on calorie intake reduction and increased physical activity) and were encouraged to invite up to 3 support partners to participate. Participants attended treatment meetings wkly for the first 6 months, biweekly from 6-12 months, and monthly from 12-18 months. Support partners received the same assessment and treatment as participants.	1. There were no significant weight loss differences between participants who brought support partners and those who did not at 6, 12, and 18 months. 2. Participants who had at least one successful (lost ≥10% of body wt.) partner lost significantly more weight at 6, 12, and 18 months than participants with no successful partners and those who did not bring a partner. 3. Having multiple successful partners did not correspond with greater weight loss for participants.	1. Past research that has not found an effect of peer support on weight loss success may be explained by the findings of this study: "involving support partners in obesity treatment is likely to result in better weight losses only when the support partners are themselves successful at losing weight" (p. 343). 2. Participants should be encouraged to invite support partners who want to lose weight. 3. A randomized controlled trial would be good.	This article took peer support to a new level and helped give a possible explanation to studies that have not shown peer support to be helpful in weight loss. This raises the question: What if a spouse lacks a desire to lose or maintain weight loss? Does this negatively affect the spouse who wants to lose or maintain weight loss?

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Hamilton, N.,	"This study	Weight Loss	40 female	A questionnaire and	1. Wife's income	"The high	This article has good
&	explores the	Success (number of	clients (25-46	structured interview	was positively	percentage of	information on family
Zimmerman,	possibility	pounds lost and	years old) of a	(1-1.5 hours) were	correlated with	women with no	systems theory and
R. (1985)	that most	maintained for six	nationally	administered in the	weight loss success.	income (or no	obesity. It is likely
	obesity, and	months); Power-	franchised diet	participants'	2. Control of the	job) who were	that the number of
Weight	specifically	Dependence	program who	homes, six-months	checkbook was	unsuccessful at	women working
control: The	that	(education, income,	had completed	after completing or	negatively	weight loss	outside of the home
interaction of	occurring in	occupation, and	or dropped out	dropping out of	correlated with	maintenance is	has increased since
marital power	a marital	control of	of the program	weight loss	weight loss success.	consistent with	this study was
and weight	relationship,	checkbook);	six months	program.	3. Whether the	the prediction	conducted. It would
loss success	cannot be	Support	prior to the		husband or another	that where a	be interesting to see
		· ·	study.		1	1	•
						-	conducted today.
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	resolved without attending to the power-dependence imbalance in a family system" (p. 54).	(participants were asked open-ended question about who was most supportive of their weight loss efforts); Weight Onset (age at onset of weight problem).	study.		person was identified as most supportive of weight loss was not a significant variable.	power-dependence imbalance exists enduring weight loss will be difficult" (p. 62).	results from this study conducted today.

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	Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
	Lewis, M. A., & Rook, K. S. (1999) Social control in personal relationships: Impact on health behaviors and psychological distress	"To address a gap in the literature by examining the tactics used by social network members in attempting to induce health behavior change" (p.	Social control attempts by overall social network (how many times network members urge participant to change 13 designated health behaviors); Social control attempts by a specific network member (describe a situation in which a	242 residents of 3 counties in Southern California, 57% were men, 82% had some college education and 73% were married. Sample was 88% white, with a median	601 people from a representative sample of people in three counties in California were randomly selected and mailed a survey with questions pertaining to each of the variables to be compared. 242 people responded, completed, and	1. "86% reported experiencing social control from their social network members" (p. 66). 2. "Among the network members identified as attempting to exercise social control sometimes to very often, 34% were friends, 53%	"Greater social control was associated with worse, rather than better, health practices when assessed in terms of overall influence attempts exerted by the social network,	1. It is possible that having a lot of people trying to influence a person's health behaviors makes that person rebel. 2. Social control may make a person feel bad but at least it positively impacts health behavior change.
11/		64).	specific person tried to influence them to do something health related, who the person is and how often they try to influence the participant's health); Strategies of social control used by a specific network member (checklist of ten strategies); Psychological distress aroused by a social network member's social control attempts (eight negative	age of 45-54 and a median annual income of \$45,000- \$54,999.	mailed back the surveys.	were family members, and 73% were spouses" (p. 66). 3. For overall social network social control efforts "More frequent social control directed toward health enhancing behaviors was associated with fewer, rather than more, health enhancing behaviors" (p. 67). 4. "Positive social control strategies were significantly related to behavior	whereas social control was associated with behavior change in a beneficial direction when assessed in terms of influence attempts by a particular network member" (p. 68).	

Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
	Study	affect items); Health behavior change in response to a social network member's social control attempts (survey question); and marital status were collected through a survey mailed to randomly selected participants.			change and also to feelings of sadness/guilt" (p. 67). 5. "Negative social control strategies were unrelated to health behavior change, but were significantly related to feelings of hostility/irritation and sadness/guilt"		
		r r			(p. 67).		

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Logic, M., Okun, M. A., & Pugliese, J. A. (2009) Expanding the meditational model of the effects of health-related social control	"Examine the utility of expanding the meditational model of health-related social control by incorporating the action readiness component of emotions" (p. 1374). Action readiness includes the desire to resist or the desire to undertake action to overcome an obstacle.	Duration of dating relationship (must be > or =3 months); Self assessed health status; Social control (use by their dating partners of 10 social control strategies in last 3 months - six positive, four negative - to get them to change a health behavior); Affect aroused by social control attempts -seven positive, five negative affective responses- ranged from angry to grateful measured on a 5-point scale; Motivation to change (measured on a 7-point scale); Extent of health behavior change (measured on a continuum); Action readiness variables (four items measured reactance).	317 dating students in a dating relationship (65 males, 249 female, 3 no gender reported) enrolled in an intro psychology course. 78% female, 50% Caucasian, 13% Hispanic, 4% Asian, 3% Native American, 2% African American, 28% other, 63% under 19, 30% 19-20 and 7% 21-29. 75% reported good health with 17% reporting excellent and 8% fair or poor health.	Researchers administered questionnaires to college students in dating relationships to test an expanded meditational model of social control.	1. "Negative social control was positively related to negative affect" (p. 1382). 2. "Negative affect was positively related to reactance and hiding unhealthy behavior" (p. 1382). 3. "Reactance was positively related to hiding unhealthy behavior" (p. 1382). 4. The relationship between positive social control and behavior change was mediated by motivation to change and positive affect. 5. Negative social control was positively associated with behavior change.	The authors concluded that positive social control may influence health behavior change by increasing motivation to change and reducing reactance. Reduction in reactance may lead to less hiding of unhealthy behaviors. Negative social control is more complex because it may increase reactance and hiding behavior, while also increasing health behavior change.	1. Social control, specifically negative social control, is complex. What is experienced as negative may still benefit health behavior change. However, negative social control can have negative consequences as well. 2. Data was based solely on self-report of one person in a couple.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Markey, C. N., Markey, P. M., & Birch, L. L. (2001) Interpersonal predictors of dieting practices among married couples	"To determine interpersonal predictors of dieting practices among married couples. To ascertain the extent to which various dimensions of marital relationships uniquely contribute to dieting behaviors" (p. 466).	Weight status (BMI, taken by researchers); Weight concerns (Weight Concern Scale); Depression (Center for Epidemiological Studies Depression Scale); Self-esteem (Self-Esteem Scale); Love and harmony (Marital Interactions Questionnaire); Understanding of spouse (Understanding: Perspective Taking Scale); Overall Marital Quality (principal- components analysis of four marital scales); Dieting behaviors, Weight Concerns Scale (Weight Control Behaviors Scale).	187 married couples, from the eastern U.S. with 5-year-old daughters. Couples participated in a larger longitudinal study. Women's mean age=35, Men's mean age=37. All euro-American.	Couples were interviewed and measured by trained personnel during scheduled visits to the lab.	1. For husbands none of the marital or intrapersonal constructs predicted unhealthy dieting. For wives, unhealthy dieting was related to high BMI, weight concerns, depression, and low self-esteem. 2. For wives unhealthy dieting was related to poor marital quality, lack of harmony, love, little understanding, and the perception of little understanding from spouse. 3. There is an interaction between self-esteem, marital quality and unhealthy dieting behaviors for women.	Findings suggest that the quality of an individual's interpersonal relationships may determine the extent to which relationships are associated with positive and negative health outcomes.	This study uses established measures and supports that gender differences exist in the area of marriage and dieting practices. It is a well organized article.

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 Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Okun, M. A., Huff, B. P., August, K. J., & Rook, K. A. (2007) Testing hypotheses distilled from four models of the effects of health- related social control	"To add to existing knowledge about health-related social control by distilling from the literature four models of the effects of social control and examining them in college students involved in dating relationship" (p. 185).	Quality of dating relationship (Quality Marriage Index); Health behavior targeted for change (survey); Social control (survey); Affect aroused by dating partner's social control attempts (survey); Health behavior (survey about whether participants had tried to change their behavior in response to partner's attempted social control).	401 college students involved in heterosexual dating relationship for at least 3 months. The majority (53%) reported they had been in the relationship longer than 1 year. Seventy-three percent were women. 56% white, non-Hispanic; 9% Hispanic; 7% Asian; 3% African American; 2% American Indians; 23% other.	Students were administered a survey in groups ranging from 2 to 20 people. Dual effects and Contextual models used hierarchical regression to test hypotheses. Domain-specific model and meditational model used simultaneous regression analysis to test hypotheses.	1. Dual effects - social control strategies predicted both health behavior change and negative affect. 2. Domain-specific-positive social control was related to positive affect and negative social control was related to negative affect. 3. Meditational - positive social control exerted both direct and indirect effect, via positive affect, on health behavior change and negative affect on hiding unhealthy behavior. 4. Contextual - quality of dating relationship moderated the influence of positive and negative social control on hiding unhealthy behavior.	Models were not tested against each other, but rather each shows a pathway by which social control influences health behavior. It is a possibility that social control attempts affect the quality of the dating relationship.	While the study was of dating relationships, the results may point to ways husbands can use positive social control and avoid negative social control to support their wives weight loss goals effectively.

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Author	·/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Pearce, LeBow, D., & Orchard (1981) Role of spouse involver in the behavior treatmer overweir women	M. I, J. ment ral nt of	Previous research found that participants whose spouses were included in weight loss treatment lost more weight than participants whose spouses were not included. Pearce, et al. wanted to evaluate if the effect was due to active training of spouses or just preventing spouses from sabotaging their spouses' weight loss efforts.	Weight loss; Spouse participation: Cooperative Spouse (spouses attended all sessions and were given specific tasks to help spouse lose weight), Wives Alone (spouses did not attend sessions & were not contacted by the therapist), Nonparticipating Spouse (Spouses did not attend sessions but were sent a letter asking husband to detach themselves from their wives efforts but not sabotage efforts), Alternative Treatment (focused on underlying overeating causes instead of specific behavioral change principles) & Delayed Treatment Control.	68 women ≥ 20% overweight, 20-60 years old, no concurrent medical problems, and husbands were willing to participate in the program.	Participants attended 10 weekly treatment sessions. Except for the Alternative group, sessions focused on reducing caloric intake, increasing physical activity and using "various treatment techniques commonly incorporated in behavioral self-control programs for obesity" (p. 238). Level of spouse involvement was based on the treatment condition.	1. There were no significant differences between groups at post-treatment. 2. At 6-month follow-up the Cooperative Spouse Condition lost more weight than the Alternative Treatment Condition. 3. At the 12-month follow-up, the Cooperative Spouse condition had lost more weight than the Alternative Treatment and the Wives Alone condition. 4. Cooperative spouse group and Nonparticipating spouse group maintained losses at follow-up.	1. "The data suggest that training spouses to actively aid their wives' weight loss efforts and telling spouses not to punish, criticize, or tease their wives may both be effective strategies in generating long-term weight maintenance" (p. 242). 2. There is no way of knowing which of the interventions, under the general label of social support lead to superior maintenance of weight loss.	1. The current study is limited by only including women. However, the way spousal support effects men and women may be different and it would be interesting to see this study repeated with men as the participants and wives offering support. 2. Although the Cooperative Spouse group did not lose significantly more weight than the other groups post treatment that was the trend. They were followed by the Nonparticipating Spouse group, Wives Alone and Alternative Treatment. 3. Results suggest that husbands should be instructed not to sabotage their wives.

•	Author/Title	Intention of	Key Variables and	Participants	Method	Results	Conclusions	Analysis/Comments
		Study	Measures					
	Perri, M. G.,	"We	Weight loss;	75 individuals	Participants were	 All three groups 	1. "The	This article highlights
	McAdoo, W.	questioned	Treatment	21-60 years of	randomly assigned	lost significant	effectiveness of	the difficulty with
	G.,	whether	condition	age, 20%-	by sex to one of the	weight, pre to post	the therapist	maintenance once
	McAllister,	maintenance	(behavioral therapy	100%	three treatment	treatment.	contacts	active treatment is
	D. A., Lauer,	programs	plus a peer-support	overweight.	conditions.	2. At 7-month	appeared to be	complete. One
	J. B., Jordan,	consisting	maintenance		Treatment included	follow-up the	derived from	problem with
	R. C.,	exclusively	program;		20 weekly group	therapist contact	greater	comparing the peer
	Yancey, D.	of either peer	behavioral therapy		sessions focused on	group showed	participant	support and therapist
	Z., & Nezu,	self-help	plus a therapist-		cognitive	significantly better	adherence to	conditions is that the
	A. M. (1987)	group	contact		behavioral weight	weight loss	self-control	therapist condition
		meetings or	maintenance		loss methods,	progress than other	strategies" (p.	appears to be an
	Effects of	client-	program; or		including	two groups. All	617).	extension of
	peer support	therapist	behavior therapy		information about	three groups	2. The progress	treatment that the
	and therapist	contacts	only.		diet and exercise.	showed significant	was limited to	peer support
	contact on	would foster			The peer support	weight regain from	the period in	condition did not
_	long-term	better weight			group was	7-month to 18-	which the	offer. Other studies
120	weight loss	loss progress			instructed on how	month follow-up,	participant was	have shown that one
_		compared			to form their own	with no significant	in treatment	of the greatest factors
		with a			support groups,	variance between	with the	in increasing weight
		control			given a location to	the groups.	therapist,	loss is extending the
		condition in which clients			meet and scheduled to meet biweekly.		therefore weight	length of treatment. It
		received no			The therapist-		loss programs need to be a	would also be helpful to know the rate of
		additional			contact group was		year or more in	attendance for the
		contacts			scheduled for bi-		length and use a	maintenance sessions
		during the			weekly sessions.		variety of	in each condition.
		period			Last group had no		maintenance	in cacii condition.
		following			follow-up meetings.		strategies.	
		treatment"			ionon up meetings.			
		(p. 615).						
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•	Author/Title	Intention of	Key Variables and	Participants	Method	Results	Conclusions	Analysis/Comments
-		Study	Measures					
	Perri, M. G.,	To evaluate	Weight loss;	14 men and 76	All treatment	 Significant 	1. Multi-	This study shows the
	McAdoo, W.	if the	aerobic exercise;	women, 22-60	included 20 weekly	weight loss during	component	importance of
	G.,	addition of	multi-component	yrs old, 20% to	group therapy	treatment phase for	weight loss	exercise in weight
	McAllister,	aerobic	maintenance	100% over-	sessions. One	all conditions, with	maintenance	loss treatment and
	D. A., Lauer,	exercise to a	program (During	weight.	treatment condition	aerobic exercise	program helps	active maintenance of
	J. B., &	behavioral	last four sessions		included traditional	group showing	to stall weight	weight loss behaviors,
	Yancey, D. Z.	treatment	participants		weight loss	significantly greater	regain.	through peer and
	(1986)	program for	received info on		behavior therapy	weight loss than the	However, at the	professional contact.
		weight loss	forming peer self-		interventions.	other groups.	end of active	It is hard to know
	Enhancing	and a multi-	help groups post-		Participants were	2. At all follow-up	treatment or	how big a role peer
	the efficacy	component	treatment.		encouraged to	sessions groups that	maintenance	versus therapist
	of behavior	maintenance	Instructed to		exercise and given	received aerobics	program	support played. Given
	therapy for	program	monitor each		a list of activities	training or	participants	that the limit of the
	obesity:	following	other's weight,		with the calorie per	maintenance	tended to	progress was tied to
	Effects of	treatment	praise progress,		hour expenditures.	program showed	decrease	ongoing
_	aerobic	enhance	problem solve and		2 nd treatment	significantly better	adherence to	accountability to
121	exercise and a	long-term	meet twice a month		condition added	weight loss	behavioral	others and adherence
	multi-	efficacy.	during the year		aerobic exercise to	progress than	principals	to behavioral
	component		post- treatment.		traditional behavior	behavior therapy	2. Including an	principles, it appears
	maintenance		Participants also		therapy, with	only group.	aerobic exercise	that a person may
	program		received postcards		written handouts,	3. The behavior	component in	benefit from an
			to return weekly to		therapist led	only group showed	treatment helps	accountability partner
			therapists with their		demonstration, and	significant weight	to increase	that is a person in
			weight and calorie consumption,		practice during treatment sessions.	regain at 6 months; Behavior with	weight loss.	their everyday life (i.e. spouse).
			during the first 6		Post treatment	aerobics had weight		(i.e. spouse).
			months post-		conditions	regain at 12		
			treatment.		included: no	months;		
			Therapists then		contact (except	Maintenance group		
			called clients to		weigh-ins), and	did not have		
			discuss info		Multi-component	significant regain		
			received.		program.	until 18 months		
			10001100.		Program.	post-treatment.		
						r sor a camion.		

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Author/Title In	ntention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
McAdoo, W. "tl G., Spevak, ef. P. A., & of Newlin, D. B. co (1984) pr de Effect of a en multi- du component be maintenance the program on obs	o evaluate the fectiveness a multi- component cogram esigned to chance the carability of chavior erapy for oesity" (p. 30).	Weight change (body mass index and a weight reduction quotient obtained by dividing the number of pounds lost by the number of pounds overweight at pretreatment); Maintenance program (two treatment conditions: six booster sessions or six sessions of training in the use of a multi- component maintenance program, both following standard behavioral treatment).	43 participants, 21-60 yrs of age, 20% to 80% overweight, free of obesity-related medical disorders and had their physician's approval to participate.	Randomly assigned participants to one of two groups: Group A: Behavioral weight loss treatment - 6 bi-weekly booster sessions included review and reinforcement of treatment strategies. No further contact with therapist or group members except follow-up assessments. Group B: Behavioral treatment plus 6 bi-weekly multi-component sessions, taught strategies to enhance weight loss progress, how to form peer self-help groups. Groups were encouraged to meet regularly for 1 year. Client and therapist weekly mail and phone for 1 year.	1. Participants in multi-component program demonstrated significantly greater maintenance of weight loss compared with behavior-therapy-plus-booster-session group (10.03 lbs vs. 0.79 lbs 21 months post treatment) 2. As the multi-component program ended, those participants began to regain weight at 15 and 21 month follow-ups.	1. "A program of post-treatment social support and client-therapist contacts significantly enhanced the maintenance of weight loss." (p. 481) 2. The cost of providing an additional year of therapist time for 5-15 minute weekly phone calls is high in relation to the amount of weight loss maintained (10 lbs.) over 21 months.	This study supports the role of social support and extended treatment in weight loss maintenance. The commencement of weight regain at the end of the contact period may point to the need to consider healthy weight maintenance as a chronic need for those who are obese.

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McAllister, D. A., Gange, D. J., J. Jordan, R. C., McAdoo, W. G., & Nezu, A. M. (1988) Effects of four maintenance programs on the long-term management of o'obesity maintenance improve exercise program. Social mileuence program contact plus aerobic exercise program. Social mileuence programs on the long-term management of o'besity program. Social mileuence programs on the long-term management of coesting improve exercise program. Social mileuence programs on the long-term management of exercise program. Social mileuence programs on the long-term management of exercise program. Social mileuence programs on the long-term management of exercise program on the long-term management of exercise program. Social mileuence programs on the long-term management of exercise program on the long-term management of exercise program. Social mileuence programs on the long-term management of exercise program or exercise program on the long-term management of exercise program or exercise program on the long-term management of exercise program or exercise program on the long-term management of observed plus post-treatment program. BCA; treatment program-BCA; behavior therapy of the exercise program on the long-term management of observed plus post-treatment program-BCA; behavior therapy of the exercise program during maintenance would improve under the program of the exercise program or the long-treatment therapist except 6, behavior therapy of the exercise program or the long-treatment therapist except 6, behavior therapy of the exercise program or the long-treatment therapist contact plus aerobic exercise program or the long-treatment therapist lead to the therapist lead difference between program over the therapist cand till that an utilitaceted of tifferences between program behavior and the therapist except 6, the program-BCA; the pr		Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
participation in long-term	II J II II II II II	McAllister, D. A., Gange, J. J., Jordan, R. C., McAdoo, W. G., & Nezu, A. M. (1988) Effects of four maintenance programs on the long-term management	determine effectiveness of a year- long weight loss maintenance program. 2. To determine whether the addition of social influence strategies to maintenance program improve post- treatment progress. 3. To determine if inclusion of a high- frequency exercise program during maintenance would improve	treatment conditions (behavior therapy only-B; behavior therapy plus post- treatment therapist contact-BC; behavior therapy plus post-treatment contact plus social influence maintenance program-BCS; behavior therapy plus post-treatment contact plus aerobic exercise maintenance program-BCA; behavior therapy plus post-treatment contact plus aerobic exercise maintenance program-BCA; behavior therapy plus post-treatment contact plus both aerobic exercise and social influence maintenance	women from 22-59 years of age between 20% and 100% over- ideal	randomly assigned (by blocks stratified by percentage over weight) to one of five conditions. All participants attended 20 weekly group sessions focused on behavioral weight loss techniques. Bhad no further contact with therapist except 6, 12, and 18 month post-treatment assessments. BC had 26 biweekly therapist contacts (including weighins, review of selfmonitoring and problem solving); BCS-added monetary incentives, instruction on how to provide peer support through phone contact and group meetings,	significant amounts of weight pre- to post-treatment, with no significant differences between groups. 2. At 6, 12, and 18-months follow-up all four conditions with post-treatment maintenance showed significantly better weight loss progress. 3. There were no significant differences between four experimental conditions at follow-up. 4. BCAS was the only condition to show significant additional weight loss from end of treatment to 6-mo follow-up. 5. BCAS maintained 99% of post-treatment weight loss at 18-	findings indicate that an intensive, therapist-led program directed toward teaching clients how to deal with specific problems of the post-treatment period can indeed enhance the long-term maintenance of weight loss" (p. 533). 2. Adding a social influence program improved adherence but did not show significantly better weightloss progress. 3. Combination of support from peers, therapist and exercise holds potential	impacts the results. However, it may be that a multifaceted approach is what is needed. 2. This article shows the benefit of social support within the context of multicomponent maintenance

Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
				delivering lectures		management of	
				on weight loss;		obesity.	
				BCA- behavioral			
				therapy, therapist			
				contact and			
				therapist led			
				exercise; BCAS-see			
				variables section.			

	Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
125	Ren, X. S. (1997) Marital status and quality of relationships: The impact on health perception	Study investigated how a variety of family conditions (including marital status as well as the quality of marital and cohabiting relationships) influence global health perception.	Health (self-reported global perception); Marital status (married, separated, divorced and not cohabitating, widowed and not cohabitating, cohabitating, nevermarried and not cohabitating); Quality of relationship (overall rating, housework fairness, communication, problem-solving, & prediction of future of relationship); Social support; Individual income.	12,274 American adults who participated in the National Survey of Families and Households.	National sample asked how individual would describe their health compared to others (very poor - very good) and other variables. Unclear how information was gathered. Logistical regression performed.	1. Separated 2.23 times more likely to report poor health compared to married. Divorced 1.31 times, Co- habitating 1.35 times. Widowed and never-married no significant findings. 2. People unhappy with their relationship 1.39 times more likely to report poor health.	Overall empirical findings support the notion that marriage provides protection to individuals and that the health impacts of marriage are determined by social network support such as emotional support, economic ties, and participation in social activities. Also, the health of individuals depends not only on marital status but also on the quality of marital and cohabiting relationships.	This article takes separation and co-habitation into account, as well as quality, but it would be interesting to look at both partners and not just the individual. Measures lack validity data.

Author/T	tle Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Renjilian, A., Perri, M. G., Nezu, M., McKelvey W. F., Shermer, F. L., & Anto S. D. (200 Individual versus gro therapy for obesity: Effects of matching participant to their treatment preference	M. individual A. versus group therapy interventions for the treatment of n, obesity, l) based on individual preferences to for individual or group therapy.	Individual vs. group therapy; Preferred vs. non-preferred modality; Weight loss (measured by researcher); Psychological functioning (General Severity Index of Symptoms Checklist-90Revised).	75 obese (BMI 28-45) adults (21-59 yrs. old) who expressed a clear preference for individual or group treatment for obesity.	Participants participated in 26 weekly sessions of cognitive- behavioral weight management training. They were divided into two conditions: Group vs. Individual treatment. In both conditions each session focused on weighing-in, reviewing self- monitoring records, positive feedback from therapist, problem solving and introduction to new weight-loss strategy. Group sessions lasted 90 minutes and individual sessions were 45. All participants completed psychological measures pre and post treatment.	1. "Group therapy produced significantly greater decreases in body weight and BMI than did individual therapy." (p. 719) 2. "Matching clients with their preference for individual or group therapy did not enhance treatment outcome in terms of either weight loss or psychological functioning" (p. 719) 3. Participants in all conditions showed significant improvement in psychological functioning from pre to post treatment. 4. Participants in individual condition evaluated their therapists more positively than participants in group condition.	Finding that group treatment produces more weight loss than individual treatment suggests that it should be the first method of treatment utilized for obesity, and it is lower cost. Higher ratings given to individual therapists are likely a reflection of greater individual attention.	These findings are significant because they suggest that group therapy is most helpful in the treatment of obesity, even if that is not the clients preferred modality. What is the power of the group? This supports the important role of social support in weight loss.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Umberson, D.	This study	Social control (how	Participants,	90 minute face-to-	1. Being unmarried	Married men are	The measures used
(1992)	was	often does anyone	age 24 and	face interviews	is associated with	most likely to	lack validity data and
	conducted to	remind you to do	older in a	were conducted.	more negative	identify a	a single-item
Gender,	investigate	something to	national panel	Health behavior	health behaviors.	spouse as the	indicator of social
marital status	the	protect your	survey in 1986	questions were	2. Married men	person who tries	control was utilized.
and the social	mechanisms	health?); Health	(<i>N</i> =3617), &	modeled after past	report more social	to control their	The article also
control of	by which	behaviors	re-interview in	research in the area.	control over health	health. The	includes many
health	social	(drinking, smoking,	1989 (<i>n</i> =2867).		behaviors than all	findings suggest	variables but does not
behavior	relationships	bmi, sleep, physical			other groups.	that marriage	separate separated
	reduce	activity); Marital			3. Women are more	may benefit the	and divorced
	mortality.	status			likely to be social	health of men	participants in this
	Marriage	(divorced/separated			control agents for	more than	analysis.
	may be	, widowed, never-			married and	women partly	However, the results
	beneficial to	married, married &			unmarried.	because	are interesting and are
	health	marital status			4. Those who	marriage	consistent with
	because of	change); Parental			shifted from	provides more	women being more
5	social	status (childless, at			married to un-	social control	likely to influence
1	control.	least one child over			married exhibit	for men.	health behaviors.
		16, only minor			more negative		
		children).			health behaviors.		

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Verbrugge, L. M. (1979) Marital status and health	This paper examines marital status differences in health for the U.S. population to determine if morbidity and disability rates are higher for non-married people than married people.	Health (incidence of acute conditions, percentage limited activity, percentage with work disability, rates of restricted activity, number of doctor visits, percentage with hospital stays within the last year); Marital status (single, married, divorced, widowed, separated).	Data from health surveys conducted by National Center for Health Stats 1960 and 1970 Censuses of Population. Sample size not given.	The surveys conducted are not printed in article. Data was age standardized to control for age effects.	1. Divorced and separated people experience acute conditions more often than other marital groups. But no persistent pattern for males. 2. Among women, divorced and separated are injured more often than married. 3. Formerly married are most likely to have limiting/chronic conditions. 4. Formerly married have much higher rates of short-term disability. 5. Formerly married = more doctor visits. 6. Mortality rates are best for married, then singles, then widowed, followed by separated and divorced.	Married people appear healthiest, having low rates of chronic limitation and disability. These results are explained by marital roles and lifestyles which influence health, by selectivity into a marital status because of health, and by propensities to take health actions when feeling ill.	Divorced and separated people appear least healthy. Single people are not that different from married in this study on many measures. This article thoroughly discuses possible reasons for the findings. However, the study was conducted in the 1970s and the results might be different today.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Weight Loss Maintenance Collaborative Research Group (2008) Comparison of strategies for sustaining weight loss	"To compare two weight loss maintenance interventions with a self-directed control group" (p. 1139).	Weight regain (measured by researchers); Weight loss maintenance intervention (Three treatment conditions - see method).	overweight or obese adults (38% African American, 63% women) with hypertension, dyslipidemia, or both who had lost at least 4 kg during a 6-month weight loss program (phase one) who were randomized to a weight-loss maintenance intervention (phase two).	After phase one, participants were randomly assigned to one of the three following groups for 30 months: monthly personal contact (10-15 minute phone contact with interventionist monthly with 45-60 minutes every forth month in person), unlimited access to an interactive technology-based intervention, or self-directed control.	1. "Participants in the personal contact group regained less weight than those in the self-directed group" (p. 1139). 2. "At 30 months, weight gain did not differ between the interactive technology-based and the self-directed group. However, at 18 and 24 months the technology based group had lower weight gain than the self-directed group" (p. 1139). 3. There were no significant effects for gender, race or age 4. All groups regained weight after phase one.	The fact that personal phone contact was beneficial to weight loss maintenance suggests that it may be a cost effective way to improve weight loss maintenance.	This study supports long-term continued personal contact treatment for sustained weight loss. If a spouse can help serve this function, then a person could have a life-long contact person.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Wickrama, K. A. S., Lorenz, F. O., Conger, R. D., & Elder, G. H. (1997) Martial quality and physical illness: A latent growth curve analysis	To investigate the association between intra-individual changes in marital quality and physical illness	Marital Quality; Level of physical illness; Family income and changes; Work stress.	364 white wives and husbands in rural Iowa, married ≥ 14 yrs, ≥ 2 kids, with one child in 7 th grade at beginning of study.	Data was collected in 1990, 1991 & 1992. Changes in marital quality & level of physical illness were assessed, controlling for other variables.	1. Inter-individual differences in change in marital quality were significantly associated with inter-individual differences in change in physical illness for both husbands and wives. 2. Improving marital quality was associated with a decrease in physical illness, even when other variables were controlled for.	"Both the initial level of and the change in the marital quality of husbands and wives correlate with the initial level of and change in physical health, after controlling for the influence of work stress, education, and income. Additional analysis implied that psychological well-being and behaviors that are health risks mediate or explain this association" (p. 143)	Results may not be generalizable to non-rural, non-white populations. Good study because it followed changes in relationships not just differences between groups.

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Author/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Wing, R. R., & Jeffery, R., W. (1999) Benefits of recruiting participants with friends and increasing social support for weight loss and maintenance	"To determine the benefits of social support for weight loss and maintenance" (p. 132).	Weight loss (measured by researchers); Recruited alone or with friends; Social support manipulation (in two conditions participants were grouped into teams of four and were encouraged to work together in class and out of class.) Assessments were held at baseline, month four, month seven and month ten. Primary dependent measures were overall weight loss months 0-10 and weight maintenance from months 4 – 10. Weight maintenance was measured for those who expressed an interest in an additional follow-up at month 16.	participants, 82 men and 84 women. Participants randomly assigned, alone or with a team to a standard behavioral treatment (SBT) or a SBT with social support strategies.	Participants were divided into four conditions: Group One was recruited alone and received 16 weeks of SBT consisting of weekly group meetings led by a behavior therapist, a nutritionist or both, weekly weigh-ins, review of self-monitoring records and a lecture or discussion period; Group Two-recruited alone, SBT, plus social support strategies; Group three was recruited with friends, SBT; Group three-recruited with friends, SBT, plus social support strategies.	1. Participants recruited with friends had lost significantly more weight at the end of treatment and at the 10-month follow-up than participants recruited alone. 2. Of those recruited alone and given SBT, 76% completed treatment and 24% maintained their weight loss in full from months 4-10. 3. Among those recruited with friends and given SBT plus social support, 95% completed treatment and 66% maintained their weight loss in full.	Recruiting participants with friends and including a social support intervention increased weight loss and maintenance of weight loss and decreased dropouts. The poorest attendance and smallest percentage of participants who maintained their weight loss was observed among those participants recruited alone and given SBT.	This study supports incorporating people already in a participant's life in weight loss treatment and providing social support intervention.

(continued)

Autho	or/Title	Intention of Study	Key Variables and Measures	Participants	Method	Results	Conclusions	Analysis/Comments
Marcu D., Ep L. H., Jawad (1991) A "far based' approa	estein, & I, A.) mily- ach to eatment ese type petic	"To test the effectiveness of a 'family-based approach' for obese type II diabetic subjects" (p. 156).	1. Treatment condition: Alone (without spouse), Together (Couple participated in all aspects of the program together, both with a weight loss goal); 2. Weight loss/BMI; 3. Marital Adjustment (Dyadic Adjustment Scale, DAS).	Forty-nine obese diabetic individuals (≥ 20% over weight & 30-65 years old) and their overweight spouses (>15% overweight, 30-70 years old).	Participants were randomly assigned to either of the treatment conditions, Alone or Together. They then attended a 20-week behavioral weight control program. In the Together condition half of the sessions focused on increasing social support and identifying things each participant would like their spouse to do to help him/her follow the program. Spouses also contracted with each other to initiate supportive behaviors.	1. There was no significant difference between the Together and Alone conditions on PS weight loss. 2. "Patients in both conditions also reported changes in their use of listening and support strategies from pretreatment to post-treatmentdespite the fact that the listening and support skills were taught only in the Together condition" (p. 158). 3. Men lost significantly more weight when treated alone and women lost more weight when treated with their spouse. 4. There was no effect for marital adjustment.	1. One possible reason for the lack of difference in weight loss between the Together and Alone groups is that "recruiting patients and spouses together for a weight loss program may be sufficient to create a 'family based program'" (p. 161). 2. The contracting system used may have been faulty. 3. Spouse support may be helpful for women attempting to lose weight and not men trying to lose weight.	The authors' explanation of possible reasons why there was no difference found between the Alone and Together groups are good. The study shows the difficulty of controlling social support received because spouses were more supportive without being told to do so. Women may benefit more from a supportive spouse than men and/or men may need more help with knowing how to be supportive. This supports the creation of a support guide for husbands whose wives are trying to lose weight.

References

- Beverly, E. A., Miller, C. K., & Wray, L. A. (2008). Spousal support and food-related behavior change in middle-aged and older adults living with type 2 diabetes.

 Health Education & Behavior, 35(5), 707-720. doi:10.1177/1090198107299787
- Black, D. R., & Lantz, C. E. (1984). Spouse involvement and a possible long-term follow-up trap in weight loss. *Behaviour Research and Therapy*, 22(5), 557-562. doi:10.1016/0005-7967(84)90059-7
- Black, D. R., & Threlfall, W. E. (1989). Partner weight status and subject weight loss: Implications for cost-effective programs and public health. *Addictive Behaviors*, 14(3), 279-289. doi:10.1016/0306-4603(89)90059-2
- Brownell, K. D., Heckerman, C. L., Westlake, R. J., Hayes, S. C. & Monti, P. M. (1978).

 The effect of couples training and partner co-operativeness in the behavioral treatment of obesity. *Behaviour Research and Therapy*, *16*, 323-333. doi:10.1016/0005-7967(78)90002-5
- Dubbert, P. M., & Wilson, G. T. (1984). Goal-setting and spouse involvement in the treatment of obesity. *Behaviour Research and Therapy*, 22(3), 227-242. doi:10.1016/0005-7967(84)90003-2
- Goodwin, J. S., Hunt, W. C., Key, C. R., & Samet, J. M. (1987). The effect of marital status on stage, treatment, and survival of cancer patients. *Journal of the American Medical Association*, 258, 3125-3130. doi:10.1001/jama.1987.03400210067027

- Gorin, A., Phelan, S., Tate, D., Sherwood, N., Jeffery, R., & Wing, R. (2005). Involving support partners in obesity treatment. *Journal of Consulting and Clinical Psychology*, 73(2), 341-343. doi:10.1037/0022-006X.73.2.341
- Hamilton, N., & Zimmerman, R. (1985). Weight control: The interaction of marital power and weight loss success. *Journal of Social Service Research*, 8(3), 51-64. doi:10.1300/J079v08n03_04
- Lewis, M. A., & Rook, K. S. (1999). Social control in personal relationships: Impact on health behaviors and psychological distress. *Health Psychology*, *18*(1), 63-71. doi:10.1037/0278-6133.18.1.63
- Logic, M., Okun, M. A., & Pugliese, J. A. (2009). Expanding the meditational model of the effects of health-related social control. *Journal of Applied Social Psychology*, 39(6), 1373-1396. doi:10.1111/j.1559-1816.2009.00486.x
- Markey, C. N., Markey, P. M., & Birch, L. L. (2001). Interpersonal predictors of dieting practices among married couples. *Journal of Family Psychology*, *15*, 464-475. doi:10.1037/0893-3200.15.3.464
- Okun, M. A., Huff, B. P., August, K. J., & Rook, K. A. (2007). Testing hypotheses distilled from four models of the effects of health-related social control. *Basic and Applied Social Psychology*, 29(2), 185-193. Retrieved from http://web.ebscohost .com.lib.pepperdine.edu/ehost/pdfviewer/pdfviewer?sid=6a04ab8f-d5f3-4430 -8b39-62c303835c59%40sessionmgr12&vid=21&hid=9
- Pearce, J. W., LeBow, M. D., & Orchard, J. (1981). Role of spouse involvement in the behavioral treatment of overweight women. *Journal of Consulting and Clinical Psychology*, 49(2), 236-244. doi:10.1037/0022-006X.49.2.236

- Perri, M. G., McAdoo, W. G., McAllister, D. A., Lauer, J. B., Jordan, R. C., Yancey, D.
 Z., & Nezu, A. M. (1987). Effects of peer support and therapist contact on long-term weight loss. *Journal of Consulting and Clinical Psychology*, 55(4), 615-617.
 doi:10.1037/0022-006X.55.4.615
- Perri, M. G., McAdoo, W. G., McAllister, D. A., Lauer, J. B., & Yancey, D. Z. (1986).

 Enhancing the efficacy of behavior therapy for obesity: Effects of aerobic exercise and a multicomponent maintenance program. *Journal of Consulting and Clinical Psychology*, 54(5), 670-675. doi:10.1037/0022-006X.54.5.670
- Perri, M. G., McAdoo, W. G., Spevak, P. A., & Newlin, D. B. (1984). Effect of a multicomponent program of long-term weight loss. *Journal of Consulting and Clinical Psychology*, 52(3), 480-481. doi:10.1037/0022-006X.52.3.480
- Perri, M. G., McAllister, D. A., Gange, J. J., Jordan, R. C., McAdoo, W. G., & Nezu, A. M. (1988). Effects of four maintenance programs on the long-term management of obesity. *Journal of Consulting and Clinical Psychology*, 56(4), 529-534. doi:10.1037/0022-006X.56.4.529
- Ren, X. S. (1997). Marital status and quality of relationships: The impact on health perception. *Social Science & Medicine*, 44, 241-249. doi:10.1016/S0277-9536 (96)00158-X
- Renjilian, D. A., Perri, M. G., Nezu, A. M., McKelvey, W. F., Shermer, R. L., & Anton, S. D. (2001). Individual versus group therapy for obesity: Effects of matching participants to their treatment preferences. *Journal of Consulting and Clinical Psychology*, 69(4), 717-721. doi:10:1037/0022-006X.69.4.717

- Umberson, D. (1992). Gender, marital status and the social control of health behavior. Social Science & Medicine, 34, 907-917. doi:10.1016/0277-9536(92)90259-S
- Verbrugge, L. M. (1979). Marital status and health. *Journal of Marriage and the Family*, 41(2), 267-285. doi:10.2307/351696
- Weight Loss Maintenance Collaborative Research Group. (2008). Comparisons of strategies for sustaining weight loss. *Journal of the American Medical Association*, 299(10), 1139-1148. doi:10.1001/jama.299.10.1139
- Wickrama, K. A., Lorenz, F. O., Conger, R. D., & Elder, G. H. (1997). Marital quality and physical illness: A latent growth curve analysis. *Journal of Marriage and the Family*, 59, 143-155. doi:10.2307/353668
- Wing, R. R., & Jeffery, R. W. (1999). Benefits of recruiting participants with friends and increasing social support for weight loss and maintenance. *Journal of Consulting and Clinical Psychology*, 67(1), 132-138. doi:10.1037/0022-006X.67.1.132
- Wing, R. R., Marcus, M. D., Epstein, L. H., & Jawad, A. (1991). A "family-based" approach to the treatment of obese type II diabetic patients. *Journal of Consulting and Clinical Psychology*, 59(1), 156-162. doi:10.1037/0022-006X.59.1.156

APPENDIX B

Resource Booklet



MY WIFE WANTS TO LOSE WEIGHT:

HOW CAN I SUPPORT HER?

A guide for husbands whose wives want to achieve a healthy weight

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"IS THIS BOOKLET FOR ME?"

Is your wife trying to lose weight or maintain weight loss? Does she complain about her weight or ask you if she looks fat in her dress and then get upset at your answer? Most women have attempted to lose weight at some point in their lives and the majority of them have not been successful. So what might make the difference between success and failure? The answer to this question could be YOU.

This booklet provides guidelines for husbands who would like to help their wives in attaining and maintaining a healthy weight.

A few reasons why you might benefit from reading this booklet:

- You may not realize that your wife could use your support through the weight loss process.
- You may lack information about challenges to weight loss.
- · You may lack knowledge about how to be supportive.
- You may not be sure how to talk with your wife about how to support her.

This booklet will provide information about how you can support your wife and how to talk to her about what types of support she prefers. By learning the facts about how to lose weight and the unique support you can offer your wife in her weight loss efforts, you may help her reach her goals.

This resource combines research on weight loss, social support for weight loss, gender differences in communication, marriage and health, weight loss interventions that include spouses, and how families interact. This booklet has a lot of information and many helpful suggestions, but not all of the guidelines for how to be supportive will apply to you, your wife, and/or your relationship. Use what works for you and leave the rest.

As a husband, you have a unique opportunity to be supportive. While there are many people who can offer your wife weight loss support, you may be the best person because:

 You live together and therefore, have the opportunity to offer hands-on support on a daily basis.

- · You probably know her better than anyone else.
- · You have the opportunity to work as a team.

CAUTION: The information provided in this booklet is not meant to help you convince your wife to lose weight, if that is not HER goal. It is about learning to provide support if she wants to lose weight.

So, if you find yourself even slightly intrigued by this introduction on how you can provide important assistance to your wife in her quest to lose weight, then I invite you to read on. This could benefit you, your wife and your entire family.

Wives – If you picked up this booklet and are a wife who wants to lose weight, this could be a helpful tool in your journey. It was written for husbands who want to help their wives lose weight, to give them specific guidelines for supporting their wives.

If you want your husband's support or just want him to know more about what you are going through, pass this booklet along to him. Let your husband know that you would like him to help you by reading this.

GAINING WEIGHT IS EASY, LOSING WEIGHT IS HARD

It seems fairly simple. People are overweight because they eat too much and/or don't exercise enough. So losing weight should be easy. Just eat less and move more. If it were that easy, we wouldn't have so many people who are overweight or obese.

Thirty-four percent of American adults are overweight and an additional 34% are obese. Only 32% of adults are a healthy weight.

For the most part, it's not because
Americans don't want to lose weight or
haven't tried. Three quarters of women
and nearly half of men have attempted to
lose weight at some point in their lives.²
We spend over \$30 billion dollars a year
on weight loss products and services.³
Some people who attempt to lose weight
are successful; however, the majority of

Overweight — Body Mass Index (BMI) between 25.0 and 29.9

Obese - BMI equal to or greater than 30

Calculate BMI by multiplying weight in pounds (lbs) by 703 and dividing the product by height in inches (in) squared.

BMI = (weight in pounds) x 703 (height in inches) x (height in inches)

BMI Online Calculator – http://www.nhlbisupport.com/bmi/

people who try will regain most, if not all, of the weight lost.

Let's look at some of the reasons why gaining weight is easy and losing weight is hard.

PORTION SIZES ARE OUTRAGEOUS

Prepackaged food, restaurant food, and food prepared at home have all contributed to overeating by simply putting too much on the plate. Snack foods are often packaged in a way that suggests they contain one serving, but when you read the nutrition label, it says there are multiple servings in the package.

Restaurants *supersize* portions so we feel we are getting a good value.

Unfortunately, people tend to eat more when more is on their plate. This leads to consuming more calories and gaining weight.

WE ARE A SEDENTARY SOCIETY

Today's more sedentary lifestyle has reduced the daily calories expended for everyday living and created a challenge to the maintenance of a healthy weight. Prior to the industrial revolution, our society was based upon manual labor. Without machines to do the heavy lifting, the physical labor involved in working and other daily activities of life burned up many calories. Many jobs today no longer require much physical activity, causing a person to burn fewer calories.

Travel by automobile has also decreased physical activity for much of the population. How often do we ride in the car when we really could walk? Watching television, sitting at the computer, and playing video games mean less time spent moving (with the exception of exercise programs on television and video games).



LOSING WEIGHT IS HARDER FOR WOMEN THAN MEN

Women have an even greater challenge in losing weight and maintaining weight loss than men. Men carry more lean muscle mass than women, which causes men to burn more calories. Additionally, women face hormonal shifts during their lifetimes that affect their weight. Women gain weight with pregnancy and often have difficulty returning to their pre-baby weight. Menopause is another phase of a woman's life that is associated with weight gain based on physiological changes.

Women often face more societal pressures about how their bodies look than men. Your wife may view her ideal weight differently based on the family she grew-up in or cultural ideas about what is attractive. She may be encouraged

to seek an unrealistic level of thinness or discouraged from losing unhealthy excess pounds. Neither of these extremes leads your wife to aspire to a healthy weight.

LOSING WEIGHT MAY BE HARDER FOR MARRIED WOMEN THAN SINGLE WOMEN

Being married has many health benefits associated with it; unfortunately, maintaining a healthy weight is not one of them. Individuals who go from being single to married are more likely to become obese than individuals who remain unmarried. This does not mean that it is your fault your wife is overweight. It could be all the shared meals or nights spent cuddling on the couch while watching favorite television shows. Regardless of the reason, the majority of married Americans are overweight, which has significant health consequences.

For most people, being part of a family impacts how they go about their daily lives. Spouses often negotiate how they are going to spend their time and resources, and which activities they are going to do together. If couples choose to have children, then there are more people to consider. When a wife and mother wants to lose weight, it affects the whole family. If she typically comes home after work every night and cooks dinner, but now wants to go to the gym after work, that means less time together as a family. It also means dinner will be later, or someone else has to cook it. This impacts the husband and children's lives and requires adjustment by everyone.

YO-YO DIETING MAKES IT HARDER TO MAINTAIN HEALTH

Yo-yo dieting is a common term for cycles of weight loss followed by weight gain that can be very frustrating for a person trying to maintain a healthy weight. When individuals decide to lose weight they typically change their diet in some way that reduces their calorie intake,



causing them to lose weight. However, this also triggers a hormonal response that fights against weight loss. A hunger hormone (ghrelin) increases and a

fullness hormone (leptin) decreases. The body is saying "eat more because I don't want to starve." This makes sticking to a reduced-calorie eating program and maintenance of weight loss very difficult. If a person returns to her previous eating pattern, over time the weight will return as well. Adding to the challenge of keeping off the weight is the fact that our metabolic rate slows down as we get older. In other words, we burn fewer calories from the same activities as we age.

EMOTIONAL EATING ADDS TO THE CHALLENGE

Emotional eating is any eating that is not based on hunger. As a society, food is a part of our celebrations, times of mourning, and even times of boredom. Food often comforts us and makes us feel good. For example, when you were a child, did you receive a sucker from your doctor after getting a shot or a cookie from your mom after falling down? The idea that food makes you feel better is learned from an early age.

Most people have experienced eating when not hungry in some form. For example, you are full from dinner at a restaurant but go ahead and order

something from the dessert tray. Your body says it is full, but your mind wants more. For some people, emotional eating goes beyond an occasional treat to regularly using food as a coping mechanism to soothe or suppress negative emotions such as sadness, anger, frustration, boredom, loneliness, and hurt. Food can even be used to sustain feelings of happiness. Healthy foods are not usually the food of choice for emotional eating, and the person eats even when his/her body is not hungry, which leads to consuming more calories and weight gain.



Your wife may frequently engage in emotional eating if she lacks other ways of soothing emotional pain or discomfort. Each person can experience

different emotions or events as triggers to emotional eating. For example, your wife might be triggered by sadness or an argument with someone. Whatever starts an episode of emotional eating, it often ends with the person feeling guilty and defeated. She may say to herself, "I can't believe I just ate a whole box of cookies. I am disgusting! I will never be able to lose weight." If your wife feels defeated, she may decide to give up on her goals of attaining a healthy weight.

Another possibility is that she punishes herself by becoming more restrictive with her diet. Unfortunately, restriction and deprivation often lead to more emotional eating. The emotional eating cycle works like this: emotional or environmental triggers lead to emotional eating, which leads to negative thoughts and feelings that eventually lead to more emotional eating.



This cycle perpetuates itself and is detrimental to maintaining a healthy weight and good emotional health.

On pages 24-25 of this booklet you will find suggestions for helping your wife reduce emotional eating.

UNDERSTANDING THE FRAMEWORK FOR CHANGE

LOSING AND MAINTAINING WEIGHT LOSS HAS HEALTH BENEFITS

Despite the many challenges to losing weight, it's worth the effort. For a person who is overweight, losing and maintaining weight loss has many health benefits.

The health risks of obesity

Being obese or overweight can contribute to multiple diseases and adverse health conditions, including, but not limited to, high blood pressure, coronary heart disease, stroke, arthritis-related disabilities, and type II diabetes. Diabetes alone contributes to heart disease, kidney disease, high blood pressure, amputations, stroke, and blindness. Heart disease, kidney disease, and stroke can cause death.



The benefits of maintaining a healthy weight

Maintaining a healthy weight decreases the likelihood of developing certain illnesses that can cause physical impairment and death.

Avoiding physical impairment can increase your quality of life because you are not restricted by physical limitations and/or pain. Better health might even improve your sex life!

LOSING AND MAINTAINING WEIGHT LOSS REQUIRES LIFESTYLE CHANGE

It is well established that successful weight loss and maintenance of a healthy weight rely on the establishment of a *lifestyle* pattern of healthy eating and regular exercise. Fad diets, such as the cabbage soup diet, grapefruit diet, or No-Carb diet, typically lead to temporary weight loss

because of a reduction in calories consumed. However, as the dieter reintroduces a variety of foods into her diet, the weight comes back. Any temporary change can produce results, but most people want to lose weight and keep it off.

WHAT DO SUCCESSFUL LOSERS DO?

The National Weight Control Registry tracks individuals who have lost at least 30 pounds and maintained the weight loss for one year or more. Of the 5,000 individuals that the registry tracks, the majority say they keep the weight off by maintaining a low-calorie, low-fat diet, along with high levels of physical activity. The lifestyle changes that long-term maintenance requires can be very difficult, but they are possible.

There are some basic steps to losing weight that are present in many successful weight-loss programs. If your wife is considering losing weight, she should consult with her doctor prior to starting a weight loss plan. Below are the strategies that four nationally recognized organizations recommend for losing weight (Centers for Disease Control and Prevention, Mayo Clinic, National Weight Control Registry, and US Food and Drug Administration.)

Make a commitment: Commit to a weight loss plan and lifestyle changes such as long-term adjustments to diet and exercise routines to maintain weight loss.



Assess weight: Use the BMI formula and statistics, simple weight and waist circumference measurements, and/or body fat composition measuring systems to find out how much weight or fat should be lost to be in the healthy range.

Set a realistic goal: Set a realistic goal at the beginning of weight loss, based on expert advice for healthy weight loss.

Improve eating habits: Healthy eating habits include eating lower fat foods, including fruits and vegetables. Eat high calorie foods in moderation, limiting foods with high fat, salt or sugar content.



Lower calorie intake: Eat 300-500 fewer calories a day and you can lose approximately 1-2 pounds per week. There are many ways to reduce calorie consumption (even without counting calories) such as reducing portion size at each meal, while maintaining the same number of meals and snacks per day. Or eat the same portion size, but choose foods that are lower in calories. Each person must find a method that works for him/her.

Increase physical activity: To maintain a healthy weight, exercise is recommended: 2 % hours per week (30 minutes a day for 5 days) of moderate-intensity physical activity (example: walking briskly or biking casually) or 1 % hours of vigorous-intensity physical activity (example: jogging or

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jumping rope). Frequent, shorter periods of exercise add up. Monitor progress: Track results using various techniques such as weekly weigh-ins or food and exercise journals.



Get support: Support can come from many sources, including friends, family, and/or professionals. Weight Watchers, Overeaters Anonymous, Jenny Craig, and other organizations offer support partners in weight loss (other people trying to lose weight and/or weight loss counselors) to help achieve success.

By maintaining a healthy weight your wife is likely to be healthier and live longer. It will most likely require lifestyle changes that include eating healthier, exercising more, managing stress, and engaging in self-care. The information above is intended to expand your knowledge about healthy weight loss, but your wife will choose her own path. Be sure not to use any of this information to criticize her choices. She will be lucky to have you in her corner to support her in making changes that lead to successful weight loss.

"HOW CAN I SUPPORT MY WIFE?"

UNDERSTAND THE IMPORTANCE OF BEING A SUPPORTIVE SPOUSE

You may have never thought about the role you play in your wife's health, but just by getting married you increased both of your chances of being healthier and living longer. If you are happy in your marriage, you are likely to be healthier than people who are unhappy in their marriages. Having positive interactions with your wife may reduce the likelihood of negative health behaviors for both of you including smoking, excessive drinking, and poor eating habits. One study of eating habits found that unhealthy dieting by wives was related to poor marital quality, the perception of little understanding from their spouse, lack of harmony, and lack of love. This does not mean it's your fault if your wife has unhealthy eating habits. It's just that for some women marital problems can affect how they eat.

You have the power to try to improve your relationship and to learn about how to be a supportive spouse. If there is conflict in your relationship, then it would be good to work through that conflict, possibly with a marriage counselor, so that relationship problems are not impeding weight loss success.

Many weight loss programs use the power of peer support to help people lose weight. The power of social support in weight loss also has been used to improve maintenance of weight loss. However, researchers have found that social networks (family, friends, and others who interact with the person in daily life) have both positive and negative effects on the participant's attempts to lose weight. The guidelines in this booklet focus on the positive effect you can have on your wife's weight loss process.

The first step in helping your wife lose weight is reading this booklet. The second step will be to talk to your wife about how you can help. Here is an example of what you can say. (All scripts in this booklet are only suggestions for how to discuss a topic with your wife. Feel free to put the scripts into your own words.)

Sample Script: "I see you're trying to lose weight and I'm happy because you'll be healthier and live longer. I'd like to help, if you would like me to."

UNDERSTAND GENDER DIFFERENCES IN SUPPORT

Men and women can have very different views on the same conversation based on their gender. From an early age, boys and girls show differences in learning, processing emotions, and communication.

Whereas women are socialized to be nurturing and to care for others, men are typically socialized to dominate and compete. Therefore, when men do not get active support, they may feel relieved and respected, whereas women might feel neglected and disappointed. Your wife may want you to be more



involved in her weight loss efforts than you would want her to be if you were the one trying to lose weight. It is important to ask her how much involvement she would like you to have because it is likely that her answer would be different from yours.

The language of weight loss is also different for men and women. A woman described as thin may be quite pleased, while a man may think he is being called weak or wimpy. Your wife may not want to hear that her muscles are getting bigger, but prefer to hear that she is looking more toned. Listen to the words she uses when describing how she would like to look and use her words and expressions. This is not about teaching you to talk like a woman. The goal is to give you some insight that will help you to be more supportive of your wife.

Communication between men and women is complicated by gender communication differences. Husbands often get into trouble for trying to solve their wives' problems. It seems completely logical to try to help someone who has brought up a problem by offering a solution. However, women often talk about emotional problems they are having because they want someone to listen, acknowledge that it is a difficult problem, and share a similar problem they have had. This helps the woman to feel validated and

more connected to the other person. However, it can be very frustrating for a problem-solving-husband to listen without offering solutions.

Women usually do not want emotional problems "solved;" however, fixing mechanical equipment is often appreciated. For example, if your wife says she is feeling down because she didn't lose any weight this week, she may want you to simply listen and say, "That stinks, but you are doing great."

However, if she says she is upset because her treadmill is not working, it is likely that she would appreciate your offering to get it fixed. The best way to decipher whether your wife wants you to listen and empathize or help formulate solutions to a problem is to ask, "Do you want me to just listen or do you want me to help you think of solutions?"



UNDERSTAND WHAT KIND OF SUPPORT YOUR WIFE WANTS

Support means different things to different people – not all women want the same thing. Individuals differ in the kind and amount of support they desire, and what is helpful for one person may be experienced as negative by another. So what is a husband supposed to do? *Ask* his wife what she would find to be supportive. Communication is the key to learning what you can do.

Sample Script: "You know I want to support you in your weight loss goals, so what can I do to help? Would you like me to be involved or would you prefer to do it on your own? Do you want me to do anything specific?"

Good communication includes recognizing and acknowledging the different emotions your wife experiences during the weight loss process. As your wife stops overeating and begins to exercise more, she may experience emotions that she has previously avoided. This can cause her to be more sad, mad, happy, and/or cranky than usual. You can support her by understanding that experiencing more or different emotions is part of the weight loss process. Listen to her if she wants to talk and be patient, keeping in mind that these changes are most likely temporary.

HOW FAMILIES WORK

Researchers of family dynamics have found several patterns that can interfere with successful weight loss. It is important to identify any family obstacles to change so that your wife can become healthier by losing weight, and so there are no unintended consequences of her weight loss. As you are reading about each of these family patterns, consider whether any apply to your family with your wife or the family she grew up in.



RESISTANCE TO CHANGE

The disruption of family routine can be a powerful reason for people to resist a family member's weight loss efforts. The majority of us are most comfortable when things stay the same and do not change. So when one member of a family decides to change something about her lifestyle, other members of the family may resist that change. For example, a wife/mother decides she wants to lose weight and begins cooking more healthful meals that are different from what she normally prepared. As the children complain nightly that they do not like the type of food she is making, she begins to question her resolve to lose weight and eventually gives up.

LOYALTY TO THE FAMILY

In many families obesity runs through the generations and can provide a sense of family identity. If your wife attempts to lose weight, the rest of the family may view it as an act of disloyalty. When she fails to lose weight or

maintain weight loss, the rest of the family welcomes her back into the fold and loyalty to the family is reaffirmed.

COALITIONS WITHIN A FAMILY

Coalitions within the family are another way that obesity is maintained. If her mother is obese and her father is not, your wife may have subconsciously gained weight to show alignment (or a closer bond) with her obese parent. When we are children most of us want to be like an adult in our world. If our favorite uncle always wears a baseball cap and eats peanuts while watching the game, then we are likely to do the same things. So if your wife admired her aunt who was overweight, she may have initially gained weight to be more like that aunt.

PROTECTING THE MARRIAGE

Obesity can serve the function of protecting the marriage, too. Food can be incorporated into a couple's bonding time and connected to feelings of closeness. For example, if you and your wife enjoy watching movies while eating buttery popcorn and candy, then it may feel like changing this pattern could change your marriage in a negative way. You might resist giving up the junk food during movies because you enjoy that time with your wife (and the food). However, finding a way to still do activities you enjoy together, while helping her lose weight, may make your marriage even stronger.

Protecting the marriage can also take another form. Some couples admit to concerns about infidelity if one or both spouses lose weight, presumably making them more attractive to the opposite sex. The weight acts as a security blanket for the relationship, regardless of whether weight loss would have any actual impact on a person staying faithful. If you or your wife are concerned that weight loss could be a threat to your marriage, then it may be holding your wife back from getting healthier. You can most likely resolve these concerns by discussing them as a couple or with a marriage counselor, making your relationship stronger and freeing your wife to lose weight without fear that it will damage the relationship.

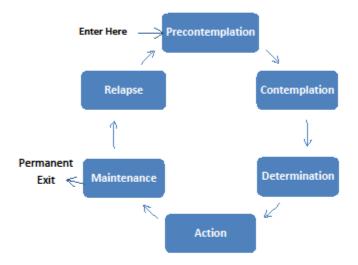
AVOIDING CONFLICT

Sometimes a family member's problem can serve a function for the whole family, and sometimes when that person changes, another family member develops a completely different problem. For example, a couple has conflict in their marriage that they do not discuss or resolve. The wife is obese and decides she wants to lose weight. As she begins to lose weight, her husband starts to drink alcohol excessively. The wife's overeating was a way to avoid the marital conflict, and without that behavior, her husband initiates a different destructive behavior so they do not have to deal with the conflict in their marriage. It will be helpful to resolve any family issues (such as unresolved conflicts) that might negatively affect your wife's ability to lose weight or result in other family problems.

MOTIVATION TO CHANGE

Lots of people say they want to lose weight, but making the needed changes in their eating and physical activity level can be very challenging. We all have habits of daily life surrounding the types and amount of food we eat and the amount of physical activity in which we engage. It takes desire and effort to change those patterns.

Change is a process. Knowing where your wife is in that process might help you support her better. The following chart and discussion are based on a well-respected model of how people change.⁴



Precontemplation

Your wife is not thinking about losing weight and doesn't see her weight as a problem. If your wife is at this stage, then this booklet is not for you at this time. Pushing your wife to lose weight may only make her resist it more.

Contemplation

Your wife thinks she may be overweight, but she is not sure that she needs or wants to change. She may go back and forth between a desire to lose weight and a desire to keep the status quo. Sometimes it may seem like there are two different people inside your wife with different opinions. At this stage

you may want to stay out of the discussion as your wife debates attempting to lose weight, or check with her to see if you understand what she means.

Talking with your wife about what she is thinking may help her gain a clearer understanding of how she feels about starting a weight loss plan. However, this can be tricky when it comes to women and weight. Some women say they feel fat hoping that their husbands will pay them a compliment. You will have to use your best judgment, based on your knowledge of your wife, to decide if listening and empathizing, paying her a compliment, or simply staying out of the conversation is best. Here are some sample scripts:

Sample Script with empathy:

Your Wife: "I'm so sick of being fat. I need to go on a diet."
You: "So you don't like the way you look and want to lose weight?"
Your Wife: "Yeah, but every time I lose weight I gain it right back."
You: "So you're not sure you want to try to lose weight because you have gained it back in the past? That sounds frustrating!"

Sample Script with compliment:

Your Wife: "I'm so sick of being fat. I need to go on a diet."
You: "I think you look great! But I'll support you, whatever you decide to
do."

Determination

Your wife has decided that she definitely wants to lose weight, and she needs to figure out how to do it. She may start looking at different weight loss programs or talking to friends about how they have tried to lose weight. If your wife wants you to be a part of the information gathering process, you can educate yourself about different programs and discuss them with her. Ask how you can be helpful. Beginning on page 36, a worksheet is provided with specific questions for you to ask your wife so you can learn what your wife's weight loss plan is and how to support her.

Action

Your wife has taken action to lose weight. She has most likely changed her eating and/or exercise habits and is working toward a goal. Keep reading for a list of guidelines you can implement during the action phase.

Maintenance

Your wife has lost weight and now has to work at keeping it off. This can be a very challenging stage because the majority of people regain much of the weight they have lost. Your wife will have to decide what eating and exercise patterns she can establish long-term, so that she is able to maintain a healthy weight. You can learn what her long-term maintenance plan is and discuss with your wife how you can be supportive.

Relapse (not everyone experiences this stage)

Your wife has gained back some or all of the weight she lost. This is common and can be very discouraging. Some people give up at this point while others return to the contemplation stage of the process of trying to lose weight again. Your wife may try a different weight loss program and/or focus more on relapse prevention.

Whatever avenue she takes, you have the opportunity to support her through this challenging journey by telling her you love her and you want to help.



Sample Script: "I know you're discouraged because you gained a couple of pounds back over the holiday, but aren't setbacks pretty typical when you are trying to lose weight? If you broke one of our glasses, you wouldn't throw out the whole set, would you? Maybe gaining a couple of pounds over the holidays is a chance to figure out how to do things differently next time."

TEN GUIDELINES FOR SUPPORTING YOUR WIFE

Now that you have information about healthy weight loss and are ready to be helpful, here are ten guidelines for helping your wife lose weight and maintain weight loss. A supportive husband may be a small piece of the weight loss puzzle that can help many, but not all, wives. By reading this booklet and incorporating the suggestions that fit you and your wife as a couple, you are doing your part, and this may change the course of her weight loss journey.

1. COMMUNICATE WITH YOUR WIFE ABOUT HER WEIGHT LOSS GOALS AND PLAN

The first step is to express your desire to help and ask permission to be involved (see script on page 14). If your wife accepts your offer, talk with your wife about her weight loss goals and how she plans to lose



the weight. More spousal communication can lead to your wife feeling more supported and to being more likely to adhere to her weight loss plan. In a previous section (pages 9-12) basic steps for losing weight were outlined. Learning about the specific steps your spouse is taking to lose weight will help you support her.

- · Is she enrolled in a formal weight loss program?
- · What are the guidelines she is following to lose weight?
- Is she reducing her calorie consumption and if so, how? She could be eating smaller portion sizes, eating lower calorie foods, avoiding certain foods, or a combination of all three.
- Is she increasing her physical activity and if so how?
- What are her goals?
- · How is she monitoring her progress?

If you know what behaviors your spouse will be changing to help meet her weight loss goals, it will give you information about where

there are opportunities for you to help. For example, if your wife says that she is planning to attend a step-aerobics class at the community center on Tuesdays and Thursdays, you can begin to think about what you can do to help her make it to that class.

Another way that you can support your wife is to be the voice of reason if her goals and/or weight loss plan are unhealthy or unrealistic. American culture idealizes super-thin models who would most likely fall in the unhealthy range of the BMI scale. It is important for you and your wife to focus on her losing enough to be a healthy weight, but not to strive for unrealistic and possibly unhealthy weight loss goals. If your wife's goal seems unhealthy, tell her about your concerns. You can use the BMI weight range information in this booklet as evidence for your concern. If your wife's weight loss plan seems unhealthy, here is an example of how you can discuss your concerns with her.

Sample Script: "I think it's great that you're trying to lose weight, but I'm worried that only eating grapefruit isn't healthy. Can you ask your doctor about it before starting the diet? I can go with you to the appointment, if you want."

2. EXPRESS A COMMITMENT TO SUPPORT YOUR WIFE IN HER WEIGHT LOSS GOALS

Let your wife know that she is not on this weight loss journey alone. Your level of involvement can vary, depending on what is best for your wife and you, but it is important to let her know that you want to support her. Here is an example of what you could say:

Sample Script: "Sweetheart, you have decided to lose weight, and I want you to know that I am here to support you however I can. I love you regardless of how much you weigh, but I want to help you reach your goals."

3. PROMOTE STRESS MANAGEMENT AND HELP REDUCE EMOTIONAL EATING

Stress and conflict can make any task more difficult and losing weight is no exception. It takes time and energy to initiate the behaviors that lead to weight



loss, and if your wife's energy is spent on reducing conflict then she might not be able to focus on her weight loss plan. If your wife is an emotional eater, then stress and conflict may lead her to eat more. You may not know she is an emotional eater if she does not overeat in front of you. Many people binge in secret because they are embarrassed by the behavior. You can approach the topic with your wife using the information provided in this booklet. Here is a possible script you can use to discuss the topic with your wife.

Sample Script: "I've been reading this booklet about how to support you as you try to lose weight. It talks about 'emotional eating.' Have you ever heard of that? Want to hear about it and tell me what you think?" (If she says yes, you can read to her from this booklet or summarize what you have read.)

If your wife says that emotional eating is a challenge for her, then there are some ways that you can support her in breaking this pattern. The first step for your wife may be recognizing whether she is eating something because she is hungry or for some other reason. She can rate her hunger from one to ten before reaching for a snack to see if she is really hungry. If you notice your wife reaching for a bag of chips, you may be tempted to ask her to rate her hunger to help her identify emotional eating. Don't do it! Policing what your wife eats will most likely cause friction between the two of you and could lead to her eating more.

As a supportive husband you should focus on your wife's emotional needs more than on what she eats. Stress management may be one of her most powerful tools in combating emotional eating. Be a person that she can talk to about her day: the good things that

happened, the hurts and the stresses she experienced. This gives her an outlet, other than food, for her distress. Relationship stress can also be a contributor to emotional eating, so working to improve your marriage, if there is conflict, might help your wife have fewer negative emotions to soothe with food. Assuring your wife that she is sexually desirable to you, regardless of her weight, can be a powerful way of enhancing her confidence and motivation.

Another way you can support your wife is by being a distraction, in a good way. If your wife expresses to you that she is upset and wants to eat, even though she is not hungry, offer to go for a walk, watch a movie (as long as she doesn't associate movie time with snack time), or simply sit together and talk. Whatever activity you suggest, make it something that is enjoyable for both of you.

You can support your wife by taking opportunities to minimize tension and focus on positive family time. Disagreements and discord are inevitable in families, but if they can be worked through without creating more stress for your wife, it will probably help her weight loss efforts. If the family discord is too great to resolve as a family, then seeking marriage and/or family counseling is advised.

4. SUPPORT YOUR WIFE'S HEALTHY FOOD CHOICES

Wives typically have a greater role in meal preparation than husbands, although this may not be true for your family. If your wife buys the groceries and prepares the meals, and she wants to prepare more healthful meals, then support her by eating the healthier food without complaining. If you don't like the way it tastes, then offer to prepare your own meal, if that would make it easier for her. If you shop for and prepare some or most of the meals, then talk with your wife about how you can purchase and prepare foods that are consistent with her weight loss plan.

Another way to support your wife's food choices is to avoid having your wife's favorite high calorie foods in the home. Instead of bringing home her favorite potato chips as a treat, buy her a flower. If you want

to eat unhealthy foods, consider doing it when your wife is not around so she is not tempted to indulge as well.

5. USE PRAISE AND POSITIVE REINFORCEMENT

Support is not a one-size-fits-all kind of thing. Your wife will have her own idea about what will be supportive, and it is important to ask her what kind of support she would like. If she doesn't want you to make a fuss about her losing weight, then don't.



However, many women like receiving compliments and praise for their successes in weight loss. If your wife is one of these women, you can notice things that she does well and give her positive feedback. This may give her additional motivation to persevere when she wants to give up. The following scripts can be used to find out if your wife wants you to give her compliments and how to give a compliment.

Sample Script:

You: "Do you want me to say something when I notice you're losing weight or making healthy choices?"

Your Wife: "Sure."

You: "Well, you look really great in those jeans!"

Sample Script with alternate ending:

You: "Do you want me to say something when I notice you're losing weight or making healthy choices?"

Your Wife: "Not really. I don't want you to make a big deal about it."

You: "Ok."

If your wife says yes to wanting positive feedback from you, then you have the opportunity to encourage your wife in the healthier choices she is making. If your wife is exercising more by taking a walk after dinner each night, you can encourage her by telling her how impressed you are that she is being more active. You can even ask if you can join her sometime, if you would like.

To find out what terms you should use when trying to give your wife a compliment, ask her the following questions:

- "What are your goals for your body as you are losing weight?"
- "What would you like to change?"
- "How do you want to look?"

She may say, "I want to lose 30 pounds and have smaller thighs." This gives you an idea of what to pay attention to. As you notice her body changing, you can comment on how small her thighs look.

6. AVOID NEGATIVE COMMENTS

Sometimes, in an effort to help a loved one get healthy, a person tries to persuade the loved one to stop an unhealthy behavior and/or to start a healthy one, by offering negative judgments and criticism.

While it is good to want your wife to be healthier, trying to push her into it can backfire. You should avoid criticizing or teasing your wife about her weight, her food choices, or lack of physical activity. If you make negative comments to your wife such as, "You shouldn't eat that dessert" or "It looks like you have gained a few pounds," it will likely make her feel bad and possibly eat more when you are not around. This reduces the likelihood that she will lose weight and can cause tension in your relationship. It is more helpful to focus on positive reinforcement like, "Wow, I am really impressed that you went to the gym after the long day you had." Staying positive helps your relationship be a happier one and helps your wife on her weight loss journey.

You may be wondering if there is ever a time to point out something negative about your wife's weight loss journey, such as when she has regained some of the weight she lost or has stopped working out. The worksheet toward the end of the booklet will provide you with questions to ask your wife about any negative feedback you might have. Her responses will guide you in if and how to approach sensitive topics.

7. CONSIDER CHANGING YOUR OWN EATING AND PHYSICAL ACTIVITY BEHAVIORS

Being supportive does not mean that you need to eat more fruits and vegetables, but it probably would not hurt. Making changes in your own diet and exercise patterns to match your wife's lifestyle choices can make your wife's life easier. Making two separate menus for each meal increases the amount of food preparation she has to do (if she is the primary cook in your home.) Being able to make only one meal will probably make her feel more positively toward you and give you both a greater sense of closeness because you are in this together. If you don't need or want to lose weight, you may still get something out of exercising more and eating healthier: feeling better than you do now. If you do want to lose weight, then working with your wife on this goal may benefit you. People who attempt weight loss with a partner are more likely to be successful in meeting their goals.

8. HELP PLAN FOR CHALLENGING SITUATIONS

Most families have traditions that revolve around food. What does your family eat on holidays and special occasions?

- Turkey and all the trimmings for Thanksgiving
- Chocolate for Valentine's Day
- Cake and ice cream on birthdays
- Chips, dip and everything else salty or sweet for Super Bowl Sunday
- Do you have a weekly pizza night or potluck dinners with friends?

Be respectful of your wife's cultural heritage and how cultural traditions and expectations that involve food can complicate weight



loss behaviors. It may be hard for either of you to make changes that respect your cultural traditions while your wife is trying to lose weight or maintain weight loss. You can support her by talking with her about adjusting your family traditions so that they are consistent with her weight loss plan, while staying connected to important cultural roots.

As your wife begins to alter her diet, she will have to consider how to prepare for special occasions that include high calorie foods, and what to do when she is eating at a restaurant or someone else's home.

If you have a weekly pizza night, can you start making healthier pizzas as a fun family activity? You can discuss how she will deal with parties that typically have calorie dense foods. For example, would she want to eat a healthy meal beforehand, and then just have a few bites at the party? You can help her come up with solutions for problem situations.

Sample Script: "Sweetheart, my work's Fourth of July picnic is coming up and I'd like us to go. I know you're eating healthier now; unfortunately they are probably going to be serving mostly junk food. Maybe we could take some turkey sandwiches with us, so we can enjoy the fun but have food that works with your weight loss plan."

This doesn't mean that you, or your wife, shouldn't be able to have a hot dog if you want one. The goal is simply to help your wife prepare for environments that might sabotage her weight loss efforts.

9. SUPPORT HER ATTEMPTS TO INCREASE HER PHYSICAL ACTIVITY

If your wife decides to engage in more physical activity as a part of her weight loss plan, you can support her in multiple ways. You can support her choice to join a gym (or participate in other physical activity that costs money) by encouraging her to use household income to pay for the activities. You can also support her activities by watching your children or taking over some household task

(examples: cooking dinner, doing laundry, or cleaning) that she would

usually be completing during the time she is exercising.

Another way that you can support your wife is by joining in her activities. Does she like to go for walks, swim, or ride bikes? Is there a non-sedentary activity that you like to do together? Also, you can look for new activities that you and your wife might like to do together. This could help your relationship grow closer while you both become healthier.



10. SUPPORT YOUR WIFE EVEN WHEN SHE GETS OFF TRACK

No one is perfect, especially when it comes to losing weight. There will come a time when your wife eats something that is not healthy or consumes a larger portion than her weight loss plan recommends. There will probably be times when she does not lose weight and even gains some of the weight back. As her husband, you have the opportunity to show her that you love her no matter what. You can encourage her to understand that she may deviate from her plan and she will probably go back to her old behaviors occasionally. She needs not to beat herself up about it. Express that you are proud of her for all that she has done and you will support her as she gets back on track (if that is what she wants to do). Part of relapse prevention is recognizing that just because you had an off day, week, or month that does not mean that you will not be successful long-term.

Sample Script: "I know you're upset because you gained a few pounds, but I read that a lot of people have that happen when they are trying to lose weight. I know losing weight is really hard and I am impressed with all the success you have had before now. I love you and if I can support you in any way let me know."

There is not one way of providing support and the script above is just one option. If you say something like this to your wife, but are not

sure if it was helpful you can ask, "Was the way I said that helpful or annoying?" Checking to make sure that she understands your good intentions is a great way to be supportive.

If she gets angry or defensive when you are doing exactly what she asked for, here is an example of what you can say.

Sample Script: "Look, I have tried to be supportive by doing
______, but I feel like it just ticks you off when I do what
you have asked. Is there something I can do differently?"

TROUBLESHOOTING

If your wife wants to lose weight and you are trying to be supportive using the guidelines in this booklet, but it is just not working, there may be something deeper going on.

COULD YOU BE UNCONSCIOUSLY SABOTAGING YOUR WIFE?

Your first response to this question may be "Of course not! I want my wife to lose weight, I would never sabotage her." On a conscious level this may be accurate, but if your behavior contradicts that belief, then you might want to consider the possibility that a part of you really wants her to stay the same.

Ask yourself the following questions:

	Question	Often	Sometimes	Never
1.	Do you bring home her favorite dessert or high calorie snack as a special present if she is feeling down, stressed, and/or just to say 'I love you?'			
2.	Do you make negative comments to your wife about her weight loss and/or roll your eyes when she talks about losing weight or her weight loss plan?			
3.	Do you complain about the time or money your wife spends on her weight loss efforts?			
4.	Do you agree to take care of your children while she goes to the gym but not follow through because you forget or were busy?			
5.	Do you treat your wife to a high calorie dinner at a fancy restaurant as a reward for losing weight?			
6.	Have you ever added fattening ingredients like oil or butter to food she is preparing for everyone to eat?			
7.	If she asks you to pick up some food from the grocery store, do you forget the vegetables, but remember the junk food?			
8.	Do you sit next to your wife eating a bowl of high calorie snack, like buttery popcorn, while you watch a movie together?			
9.	When taking your wife on a date, do you pick a restaurant that does not offer food options that are consistent with her weight loss plan?			

	Question	Often	Sometimes	Never
10.	Are you bothered by seeing your wife deprive herself of the food she loves and offer her a tempting treat to help her not feel deprived?			
11.	If you cook a high calorie meal and your wife chooses to only eat a little or eats something else entirely, do you express disappointment?			
12.	Do you find yourself feeling and expressing negative emotions toward your wife more frequently since she started trying to lose weight?			
13.	If both you and your wife are attempting to lose weight, are you secretly pleased if she doesn't lose weight or regains weight?			
14.	Do you make fun of or criticize your wife's food or exercise choices?			
15.	Does your wife ever tell you that you are doing something that makes it harder for her to lose weight?			

If you answered SOMETIMES OR OFTEN to any of these questions, you may be unintentionally sabotaging your wife's weight loss. Identify what those sabotage behaviors are and decide how you will stop them.

Asking your wife if she thinks you do things that make it more difficult to lose weight and what she would like you to do differently is a good way to start. If you want to gain a better understanding about why you were sabotaging her efforts or why you continue to do so, despite wanting to stop, then it would be helpful to meet with a counselor to discuss what may be causing this behavior and how you can make changes.

DOES YOUR WIFE HAVE A "REBELLIOUS STREAK?"

You might not be the only person sabotaging your wife's weight loss efforts. Sometimes people trying to lose weight sabotage their own efforts. Your wife could have a little war going on within herself between the part of her that wants to follow her weight loss plan and the part that wants to be a rebel. If your wife feels deprived of what she wants (certain high calorie foods), the "rebel" might win out over the "good eater" with a binge of her favorite food item. One way to avoid this is for your wife to find an eating plan that does not leave her feeling deprived.

Sometimes the person trying to lose weight rebels against others who are trying to help her. Many individuals ask loved ones to help them lose weight by monitoring the dieter's food intake, encouraging them to make healthy choices, and telling them not to eat things that are bad for them. Initially the dieter finds this helpful but over time what started out as a desired form of support begins to feel coercive to the person trying to lose weight. The wife could then rebel against this perceived coercion by engaging in the unhealthy behavior.

For example, if your wife (who is on a weight loss program) asked you to discourage her from eating a high calorie dessert, and she feels you are trying to control her, she may react by eating the dessert to spite you. She gains her sense of independence, yet loses another battle in the weight loss war.

As a supportive husband, you can avoid this pattern by focusing on positive reinforcement and avoiding monitoring your wife's adherence to her diet. If your wife tells you that she wants you to keep track of what she eats and to discourage her from eating food that is not healthy, you may want to decline this request.

Sample Script:

Your Wife: "When we're at dinner tonight, don't let me order dessert!"
You: "I don't think it's a good idea for me to tell you what to eat or not eat,
but I'll skip dessert tonight if that makes it easier for you."

KEEP COMMUNICATING!!!

Sometimes you can do exactly what someone has asked you to do and it is still not right. For example, your wife tells you that she would like you to wake her up at five in the morning so she can get in an early morning walk before going to work. However, when you wake her up at 5 AM, she yells at you to leave her alone. One of two things might have happened: either there was a miscommunication about when she wanted to wake up or it did not seem like as good an idea at 5 AM as it did at 7 PM the night before. A conversation (not to take place at 5 AM) to clarify your role in supporting her can help alleviate this situation.

	Sample Script:
	You: "I thought you wanted me to wake you up at five this morning but
	when I did you yelled at me."
	Your wife: "I know. I'm sorry. Can we try again tomorrow?"
	You: "Yes, but if you yell at me again, I'm not going to be the one to wake
	you up. Are there some other ways I can help you reach your goals?"
	The goal of this conversation is to offer your support in a way that works for both
	your wife and you.
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ASK YOUR WIFE ABOUT HER PLAN AND HOW YOU CAN HELP

You can start the conversation with these three questions. Feel free to put them in your own words. Jot down some notes to help you keep in mind her goals and how she wants your support.

"What are your weight loss goals?"
"How do you plan to lose weight and maintain your new healthy weight?"
"How do you want me to support you?"
The following questions ask how you can help in specific areas and situations.
The joilowing questions ask now you can help in specific areas and situations.
If she says she is going to exercise more, "How can I support you with your
exercise goals?"

If she plans to track her progress, "Do you want me to ask how it's going? How often should I ask you?" "Are there situations/events that make it harder for you to lose weight or stick to your weight loss plan? Is there anything I can do to make it easier?" "What do I do, if anything, if I notice you aren't following your plan or you're struggling with accomplishing your goals?"	"Are there situations/events that make it harder for you to lose weight or stick to your weight loss plan? Is there anything I can do to make it easier?" "What do I do, if anything, if I notice you aren't following your plan or you're		e says she is going to start eating differently, "How can I support you with young plan?"
"Are there situations/events that make it harder for you to lose weight or stick to your weight loss plan? Is there anything I can do to make it easier?" "What do I do, if anything, if I notice you aren't following your plan or you're	"Are there situations/events that make it harder for you to lose weight or stick to your weight loss plan? Is there anything I can do to make it easier?" "What do I do, if anything, if I notice you aren't following your plan or you're		
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"What do I do, if anything, if I notice you aren't following your plan or you're	"What do I do, if anything, if I notice you aren't following your plan or you're		
		_	

nt to celebrate your progress and/or achieving your ultimate go d how do you want to celebrate?"

CONCLUSION

Weight loss is difficult, but now your wife is not alone. She has your support. By reading and applying strategies in this booklet you are showing your desire to help your wife through this difficult journey. Your understanding about some of the challenges to weight loss, effective ways to lose weight, and the role you can play in this process will show your wife that you are on her team and no doubt earn her gratitude. You may also have learned something about how to ask for her support, when you want to make changes in your own life.

RESOURCES

HELPFUL BOOKS

Crowley, C., & Lodge, H. S. (2007). Younger next year: Live strong, fit, and sexy-until you're 80 and beyond. New York, NY: Workman.

Chris Crowley (an ex-lawyer and patient of the co-author) and Henry Lodge (an internist) have written an entertaining and no-nonsense book for men about how to get healthier later in life. The authors discuss how to lose weight and improve your quality of life. If this booklet has inspired you to get healthier with your wife, you might want to read Younger Next Year. The authors have also written a similar book for women Younger Next Year for Women.

Fletcher, A. M. (2003). Thin for life: 10 keys to success from people who have lost weight and kept it off. New York, NY: Houghton Mifflin.

Anne Fletcher combines information about the nuts and bolts of losing weight with stories about people who have lost at least 20 pounds and kept it off for at least three years. This book provides research-based information on healthy long-term weight loss with motivational stories of real-world success.

Miller-Kovach, K. (2007). She loses, he loses: The truth about men, women and weight loss. Hoboken, NJ: John Wiley & Sons.

Karen Miller-Kovach, writing for Weight Watchers, has written an insightful book about the differences between women and men and weight loss. She discusses the different ways men and women talk about weight loss, different motivations to lose weight, and the different ways men and women approach weight loss, while encouraging couples to lose weight together. This book could be helpful for a couple who want to understand more about how men and women differ in weight loss and how to lose weight together.

Tannen, D. (2007). You just don't understand. New York, NY: HarperCollins.

Deborah Tannen, a linguistics professor, wrote this New York Times best-selling book about the different ways that men and women communicate, based on how each gender views the world. Tannen discusses how men and women can become frustrated by each other because of differences in communication styles, and provides tools to improve communication. This book would be a good choice for someone interested in learning more about differences in how men and women communicate.

HELPFUL WEBSITES

http://www.cdc.gov/healthyweight

The Centers for Disease Control website provides information about assessing your weight, how to maintain a healthy weight through healthy eating and physical activity, and the health consequences of being overweight and/or obese, along with other resources.

http://www.mayoclinic.com/health/weight-loss/my00432

This Mayo Clinic website provides links to numerous articles about healthy weight loss. The site includes expert answers to frequently asked questions related to weight loss.

http://www.mayoclinic.com/health/weight-loss/MH00025

This article, Weight loss help: Gain control of emotional eating, from the Mayo Clinic website provides information about the triggers of emotional eating and steps to reduce the behavior.

http://www.win.niddk.nih.gov/publications/for_life.htm

The Weight-control Information Network, an information service of the National Institute of Diabetes and Digestive and Kidney Diseases, provides information about assessing your BMI, the benefits of losing weight, and ways to lose weight and keep it off.

http://www.nhlbisupport.com/bmi

The National Institutes of Health website provides an easy to use calculator to obtain your body mass index and the corresponding weight classifications (underweight, normal weight, overweight, obese).

http://www.nwcr.ws

The National Weight Control Registry tracks over 5,000 people who have lost at least 30 pounds and kept it off for more than one year. The website provides information about how these people have been successful in losing the weight and keeping it off. These success stories can provide inspiration.

¹ Centers for Disease Control and Prevention (2007). Obesity among adults in the United States: No statistically significant change since 2003-2004. Data Brief, 1, 8.

² Jeffery, R. W., Adlis, S. A., & Forster, J. L. (1991). Prevalence of dieting among working men and women: The healthy worker project. *Health Psychology*, 10, 274-281.

³ Blackburn, G. L. (2002). Weight loss advertising: An analysis of current trends. Introduction. Staff report from Federal Trade Commission. Retrieved from http://www.ftc.gov/bcp/reports/weightloss.pdf.

⁴ Prochaska, J. O., & DiClemente, C. C. (1982), "Transtheoretical therapy: Toward a more integrative model of change." *Psychotherapy: Theory, Research, and Practice*, 19: 276-288.