## An In-Depth Program Evaluation: Weigh To Wellness, UNC Wellness Center at Meadowmont, 2010

By

Mary Hale Petters, EP, CPT, ACSM-CIFT

A Master's Paper submitted to the faculty of the University of North Carolina at Chapel Hill In partial fulfillment of the requirements for the degree of Master of Public Health in the Public Health Leadership Program.

Chapel Hill

2010

Advisor signature/printed name

Second Reader Signature/printed name

Date

#### Abstract

The Centers for Disease Control and Prevention (CDC) characterize American society as "obesogenic"; a society characterized by environments that promote increased food intake, nonhealthful foods, and physical inactivity. (The Centers for Disease Control and Prevention: obesity statistics <u>http://www.cdc.gov/obesity/index.html</u>) Policy changes and environmental initiatives that promote healthy eating, physical activity and nutrition as well as making them accessible, affordable and easy are the best way to combat obesity and reduce the risk factors that are closely associated with it such as diabetes, heart disease and certain cancers.

Successful weight loss programs must focus on lifestyle modification, not diet alone. There is some evidence to support that lifestyle modification programs are more successful than weight loss programs in that they promote healthy living, not just healthy eating. Lifestyle modification programs for weight loss generally include proper nutrition, proper exercise in terms of frequency, type, and duration; stress management, smoking cessation and even psychological assessment and/or treatment in order to create an environment of wellness both physically and environmentally. The overall goal of lifestyle modification programs is therefore lifestyle modification, not necessarily weight loss. However, while lifestyle modification and weight loss are different, they are not mutually exclusive. Weight loss programs are geared towards weight loss but should include lifestyle modification techniques so that the weight loss can be maintained. This is because losing weight as a product of dietary and exercise changes is often not the issue; making those changes a way of life is crucial to the maintenance of those changes. For example, if a person chooses to stop smoking but continues to spend time participating in the kinds of activities that were conducive to smoking for them, they are less likely to be able to continue with cessation. It is one thing to lose the weight and quite another to keep it off over time. This paper will address the evaluation of the UNC Wellness Center program Weigh To Wellness. It is the goal of UNC Wellness Center to create a weight loss program that offers lifestyle modification techniques for weight loss that can be expanded beyond UNC Wellness Center and offered to UNC Hospital employees.

#### Introduction

"The Weigh To Wellness" (W2W) is a 12-week nutrition, exercise and lifestyle modification program offered through UNC Wellness Center at Meadowmont in Chapel Hill, North Carolina to both members and non-members in the community. Its goal is to reduce weight through lifestyle modification and has been teaching useful tools for weight loss for 5 of the 7 years the facility has been in operation. This particular program, while claiming to promote lifestyle modification, has actually been geared more towards increasing physical activity and promoting better nutrition; the areas recommended by both the CDC and the Division of Nutrition, Physical Activity and Obesity (DNPAO). The current initial testing, lectures and the exercise point the participants in the direction of weight loss rather than total wellness through lifestyle modification, as the program claims.

This evaluation was done to assess both the changes in knowledge and behavior of the participants and, of course, weight loss. It was also done so that an in-depth look at the current informal program plan could be completed in order to create a formal program plan for UNC Wellness Center. The weight loss is a product of the changes in behavior and knowledge and is used to measure program success over time. The focus of this program evaluation is to take a look at what makes the current program successful and what makes it unsuccessful so that a new program can be created that addresses as much of the lifestyle modification techniques as possible given the environment and the resources available. Success here is defined as the ability of the participant to make positive changes in their lifestyle that promote health and wellness. While weight loss is not necessarily the goal for all participants, it is the goal for many and at least one of the outcomes for most. For instance, some of the former participants of W2W have simply wanted the wherewithal to make it to the gym five days a week rather than three. The

goal for them was to develop the skills and interest in exercise so that they were motivated to exercise more often. That goal combined with the additional exercise they received through the program participation resulted in weight loss. The community of UNC Wellness Center is in need of a weight loss program that can operate to do just that; allow participants to lose weight successfully while learning techniques for maintenance through lifestyle modification. The hope is that over time, the success of the program will gain the support of hospital administrators so that the resources for a true lifestyle modification program for weight loss become available to the UNC Wellness Center members and hopefully, UNC Hospital Employees. A successful weight loss program is crucial; one that offers education, exercise, and ultimately the understanding and willingness of the staff of UNC Wellness Center to provide the participants with a well rounded and thoughtful look at weight gain and ultimately, weight loss.

A framework must be established for this program so that it can stand on its own as the lectures and exercise modalities change and information changes over time. A framework is also necessary in order for setting protocols for program evaluation as currently W2W is only evaluated by the participants on the last day of the 12 week program with a simple, paper evaluation. This evaluation asks the participants whether or not they felt the program provided them with the tools needed for reaching their personal goals. Were the instructors informative? Was the information provided over the 12-weeks helpful? Did they enjoy the exercise modalities provided to them? In order for the program to be properly evaluated, simple paper forms must be given out after each lecture and exercise session to assess how well the information was presented, whether or not they felt the information was helpful to them, whether or not the exercise modality encouraged them to participate outside of class and if there are any comments or concerns they would like to address. The hope would be to get at least a 50% return. Paper

#### Mary Hale Petters, EP, CPT, ACSM-CIFT

evaluation forms must also be given out after program graduation but without the bias of the graduation party to promote a more positive response. It would make sense to hand out the evaluation forms before the graduation potluck dinner begins or on the last day of class before graduation so as not to introduce said bias. Evaluation forms should also be sent out to graduates at 6 months and 12 months post graduation in order to see if the tools that were provided to them have been successful in allowing for maintenance. The 6 and 12-month forms would be self reported by the participants and would assess whether or not they were able to change their behavior to promote healthier living.

Finally, a decrease in the number of staff that currently run the program is in order. Currently, there are five managers running W2W which is costing the Wellness Center more than is needed. If the cost of instructors and coaches decreases, the cost of the program can also decrease or be maintained as we increase the amount of services offered. The Wellness Center has an abundance of qualified staff to run W2W. A change would not only suit the participants and Wellness Center in terms of overall cost but could encourage job retention for nonadministrative employees as well as retention of past participants. A program staff budget will also be created with the program reform.

In order to truly offer a Lifestyle Enhancement Program for weight loss to the public, we must define what makes one. While there are no specific guidelines for what makes a proper lifestyle modification program where weight loss is concerned, they should include education on proper nutrition and proper exercise, individualized to the person in terms of frequency, type, intensity and duration; stress management, education on how to keep a healthy home environment including the participation of family members; smoking cessation and even psychological assessment and/or treatment in order to create an environment of wellness both

physically and environmentally. An ideal lifestyle modification program for weight loss would also offer the kinds of initial testing to all of those interested that would give health professionals insight into the deeper issues of health; a behind the scenes look at cholesterol, blood sugar, thyroid function, body fat percentage, heart rate, height, weight, bone density, muscle mass, and cardiac function. While all of these tests are fairly easy to perform and are readily accessible at a Hospital-run facility, the costs of these tests is often high and many times has to be paid out of pocket. Thus, the aim of any good program should be to maximize what is offered to the client and minimize the overall cost.

The current program, as it exists, is managed by a team of facilitators, all in administration at UNC Wellness Center. Their knowledge, combined with an older program plan borrowed from Rex Wellness Center in Raleigh, NC is what they are currently offering as their weight loss program. There is no official program plan and therefore there is no way to evaluate it based on program protocol, goals, etc. It is very difficult to evaluate something with no plan. It has been mildly successful in the past; having participants who have lost weight during the 12 weeks they were enrolled in the program. It is unknown at this point how many have kept the weight off and whether the tools they were given are being utilized in order to maintain a healthier lifestyle. The success of this program and its participants depend on holding the participants and facilitators responsible for their actions; what they teach and learn alike. If the program plan is accepted by administration at UNC Wellness Center we will increase the initial testing to include body composition testing so that the results are more quantitative and therefore useful for the participants and facilitators to monitor over time. We will evaluate the program throughout by giving participants evaluation forms after each session and post graduation by sending out evaluation forms 6 and 12 months post to look for maintenance of

lifestyle modification techniques. We will also make changes to the staff so that we can all around better provide for the participants in terms of the look and feel of the program. And if these changes prove successful within the Wellness Center in terms of retention of staff, an increase in member participation and member satisfaction, we hope to expand the program to the main hospital at UNC. While satisfaction alone is not the main goal of the program evaluation and subsequent program plan, it is certainly important.

#### Background

UNC Wellness Center at Meadowmont in Chapel Hill, NC is a 50,000 square foot Medical Fitness facility run by UNC Hospitals. The facility offers a wide variety of cardiovascular fitness equipment as well as strength training equipment that will serve a wide range of people including the physically and intellectually disabled. Over 100 group fitness classes are offered weekly in addition to a wide variety of non-fitness related programs through the office of Health Education. It is also the home to UNC Cardiac Rehabilitation and outpatient Physical Therapy. The staff at the Wellness Center are all very educated and dedicated to the health and well being of the members. All of the Personal Trainers must have at least a Bachelor's degree in Exercise Science (Master's Degrees are encouraged) and are certified through the most reputable organizations in the country for strength and fitness training (The American College of Sports Medicine, National Centers for Strength and Fitness, and the National Academy of Sports Medicine) and must maintain those certifications through regular continuing education. The administrators are also very knowledgeable, holding Master's Degrees in Exercise Science, Athletic Training, Nutrition and Diet, and Public Health. They too are incredibly dedicated to both offering the best programs to the clients and members of the

facility and the surrounding community and maintaining the highest quality staff and facility in which to hold these programs.

UNC Wellness Center currently has around 5,000 members ranging in age from preteenagers to the elderly. Around 61% of the members are women over the age of 50; however, the Wellness Center also serves the population of the Cedars of Chapel Hill, a retirement community located just adjacent to the Wellness Center. The cost of membership averages at around \$55/month or around \$700 a year for a single member; however, there are family and couple rates available where the household can join as a unit. UNC employees are offered a membership at a reduced rate as are students. Monthly memberships are also available for those who travel to the area or for those who are uninterested in joining full time. Student memberships are almost identical to the monthly memberships except that they are offered only to students. (UNC Wellness Center Membership Plans, http://www.uncwellness.com/membershipplans.htm)

UNC Wellness also offers scholarships through the Orange County Cardiovascular Scholarship Fund for people who have a need for our services but cannot afford them. The scholarship is funded through charity spots at all of the UNC sponsored races and events. A charity spot is a spot in a race that is opened after all of the standard spots are paid for; charity spots are generally double the cost of a standard spot and all of the proceeds go to the scholarship fund. At present, \$26,081 have been awarded to people who otherwise could not afford the services at UNC Wellness Center. For those who want more personalized attention outside of the classroom, Personal Trainers are available for hire. UNC offers Pilates Reformer sessions and Massage Therapy ranging from Swedish and Myofascial massage to Lymph Drainage and Prenatal massage. And further still, there are programs such as W2W that are available various times throughout the year for an additional cost to both members and non-members. The Weigh To Wellness Program has been offered twice yearly at UNC Wellness Center since the fall of 2005. It has traditionally been advertised as a lifestyle modification program; however, nearly all of those who have enrolled have done so with the thought that it was a weight loss program. The original concept for the program was borrowed from Rex Wellness Center in Raleigh, NC and modified to suit the community in Meadowmont in Chapel Hill. Very simple statistics have been kept on participant progression: pre and post-measurements recorded in terms of percentage of weight lost or gained, inches lost or gained, systolic and diastolic blood pressure differences, differences in resting heart rate pre- and post- program and changes in Body Mass Index. Changes in circumference measurements of the waist, hips, abdomen, and chest are also recorded. No identifying information is included in any of the program statistics. The average age and gender of the participants has not been included thus far.

In each of the 12 weeks of participation, the client receives both a lecture and a group exercise session with a W2W instructor. Both the group exercise and education session are specifically catered for those enrolled in W2W so the participants are surrounded by their peers and get the personalized attention they need if the exercise modality is something they are not familiar with. All 12-weeks of the program include a different exercise modality ranging from water aerobics and strength training to Yoga. All lectures are relevant to weight loss and range from how to boost metabolism to learning how to order the healthiest foods at restaurants. The participants also receive computer software to help them count calories and they are to keep daily diet and eating records so the Dietician's can help them with food modification, nutritional balance and portion control. Each participant is also given a plate to use during meals that shows correct portion sizing for vegetables, starches and proteins. All participants also receive a

workbook to keep and bring with them to weekly meetings as each week they will be given handouts or information to add to that week's lesson.

Upon graduation, each participant has the option to continue on in a Graduate Program in which they meet with their coach once a month for 30 minutes, dietician biweekly and have access to a support group once a month. The graduates are expected to participate in exercise both in and out of the Wellness Center as well as using the tools they obtained in the program while going out to eat, grocery shopping, packing lunches for work and snacking.

#### **Evaluator Role**

An evaluation of this program is necessary to assess effectiveness, to identify strengths and weaknesses, as well as areas for improvement. It will also determine whether activities, such as the exercise modalities/nutritional and exercise information are implemented as planned. This program should be evaluated to determine the feasibility of decreasing risk factors among the target demographic, and whether set goals and objectives are measurable and attainable. Therefore I strongly believe a program plan needs developing with objectives and goals so as to evaluate whether the set goals and objectives are measurable and attainable. Program evaluation is also essential for program accountability, monitoring progress, and to help justify the need for funding and support. I am an internal evaluator as I work within the program as a lecturer and exercise professional, as well as a coach to some of the participants. My interest in this program is from the perspective of the participant; I would like to see them be successful, gaining tools and information that will help them to both want to make changes to their lifestyle and see those changes through to completion. I feel that having this evaluation done by an internal evaluator will certainly have its benefits as I have greater access to the inner workings of the program as well as the participants and the graduates. I am surrounded by their feedback as I have clients of my own who have participated in the W2W program throughout the years and who have been kind enough to make suggestions about what would have made it better for them. Another benefit to the internal evaluator is that the participants are often more comfortable with someone they know in terms of sharing obstacles and personal stories about their weight and struggles therein.

There is a very real phenomenon where most weight loss programs are concerned; it is that those in need of weight loss and therefore weight loss programs are lazy and that they gained the weight themselves with forethought and purpose. There is also a very real phenomenon that all Personal Trainers must be lean and thin and an athlete. These are very real phenomenon where exercise facilities are concerned, where the media is concerned and where the general public is concerned. Where most stereotypes are rooted in truth, they are often a measure of distraction from the actual truth which is, in this case, that health and fitness comes in many different shapes and sizes. As an exercise professional working within an exercise facility, in a teaching and coaching capacity and within the W2W program itself, I see it daily from both an observation standpoint and as the object of the interest as well; I stand out because I am not the "typical" picture of a Personal Trainer. There is a very real stigma attached to the job description of Personal Trainer wherein the person holding that position must be very thin and attractive and have, at the very least, the appearance of being extremely fit. While I am very fit, I am not typical in that I am a larger woman, bigger than the current facilitators and coaches of the W2W Program. This has the potential to cause bias within this evaluation. However, I feel this bias is certainly in favor of the participants as I can certainly relate to their plight in terms of wanting to fit in and be a beautiful person. And yet as an exercise professional who has struggled with

weight gain for years, I can and do encourage the participants to work hard to reach their goals and to work hard to accept themselves for who they are so that they can inevitably be comfortable in their own skin. Because of my closeness with this stigma, I have been able to gain unsolicited trust with the participants as they view me as someone who understands their plight and struggle; as someone who genuinely is invested in their success and as someone who has more credibility. I am therefore privy to many of their stories; embarrassing, sad, funny and very real that the other coaches and facilitators are not privy to. In this particular situation, having this role within the facility as well as within the W2W program offers me, as the internal evaluator, a better idea of what the participants actually want in a weight loss program and what would help them the most from the facility, their coaches and teachers.

An external evaluator would also be good where this program is concerned as they have no vested interests in it whatsoever and can therefore truly maintain an objective point of view. Having both an overweight evaluator and an evaluator of normal weight would be ideal. While I realize that having someone overweight evaluate a weight loss program might introduce its own bias, 67% of American adults are considered overweight; 34% are considered obese. <u>(Centers for</u> <u>Disease Control and Prevention, http://www.cdc.gov/nchs/fastats/overwt.htm</u>) Weight loss programs are designed for the overweight so it makes sense to have someone in that demographic evaluate one externally.

The ultimate program goal is twofold: to have the participants successful in the realistic goals they set for themselves and to create a program that is stable and effective enough to take to the main hospital at UNC for the employees there. Whether internal or external, the evaluators must be good listeners and negotiators, must be flexible and must harbor and practice sensitivity and cultural awareness, have patience and understanding, and present themselves in a

non-judgmental manner as this is a sensitive subject on so many levels for everyone. Success is largely dependent upon the target populations participation and attendance over the 12-week period and I, as the internal evaluator would take on a very active role in the program.

#### **Observations**

I have done an extensive evaluation on this program for three years, both as an observer and as a program lecturer and weight loss coach. I have done my best to remain unbiased and extremely objective as my interest in the program is twofold: First, I am, and have been interested in weight loss and maintenance for many, many years; and second, I want to see UNC have a successful weight loss program that continually draws in business. My interest in weight loss is also personal as I have many clients of my own as a Personal Trainer who have tried and failed at every diet out there. I too have tried to lose weight and maintain it through diet and exercise but have found that there are too many factors that are not being addressed in the usual weight loss mentality. Successful weight loss and maintenance truly require a lifestyle change on many levels; emotional, physical, mental, and in many cases, spiritual. With that said successful weight loss programs will address these issues and give recommendations and/or referrals for further assistance to the participant as needed. It is my opinion that a successful weight loss program must include:

• **Psychological assessments**: It is estimated that 75% of overeating is emotional (Love To Know: Diet, http://diet.lovetoknow.com/wiki/Cures for Emotional Eating). For this reason, it would be beneficial to determine why the person is overeating to begin with. Are they eating to fill a void and if so, is there anything that can be done in one-on-one sessions with a therapist that could help with that? What are other reasons that may contribute to

the desire to overeat or choose the foods that continue to manipulate the desire for health and wellness? Coping skills can be learned to deal with emotional overeating whether or not the root cause of the overeating is identified.

Substantial initial and post-testing: Body fat percentage must be taken when beginning a weight loss program in addition to height, weight, blood pressure, resting heart rate, BMI and circumference measurements. The most accurate ways to assess body fat are with hydrostatic weighing or with the Bod Pod. Hydrostatic weighing requires that the person be submerged completely in water and thus measures water displacement; the more fat a person has, the more they will float and therefore the more water they will displace. The Bod Pod is a device that uses a patented air displacement plethymography system that assesses body fat percentage as well as accurate measurements of fat free mass. With the Bod Pod, the person sits in an egg-shaped chamber that uses the same technology as hydrostatic weighing except that the Bod Pod does not require that the participant be immersed in water. It can accommodate people up to 7 ft. tall and up to 550 lbs. (Life Measurement Products, <u>http://www.lifemeasurement.com/products/overviewBodpod</u>) The Department of Exercise and Sport Science at UNC has equipment such as the Bod Pod that they have agreed to let the Wellness Center use at no cost. The only obstacle there is to get the participants over to the University for the testing. This could be built into the program plan. UNC also has access to a mobile Hydrostatic Weighing unit called Body Fat Test Mobile Lab. (Body Fat Test Mobile Lab http://www.bodyfattest.com/themobile-lab.html) The truck actually parks in the Wellness Center parking lot and would allow for the participants to test at our facility. These methods work with all populations to nearly 100% accuracy where other methods of body fat assessment exclude people

who are too overweight or obese. For example, the use of skin fold calipers on a person of average weight will give an accurate measurement of body fat with roughly a 3% error. However, the calipers cannot pinch skin folds over 60mm and therefore exclude a large number of people; mainly those over 40% body fat. In addition, the skin fold testing must be done at a minimum of 3 sites (all folds taken on the right side of the body whenever possible). For men, folds are measured diagonally on the chest, between the shoulder and the nipple with the arm outstretched laterally; the abdomen with the fold taken vertically roughly one inch to the right of the navel; and on the thigh with the fold taken vertically at the median of the iliac crest of the hip and the patella. For women, the folds are measured vertically on the triceps or back of the arm at the median of the acromioclavicular joint and the elbow; diagonally on the abdomen at the median of the navel and iliac crest of the pelvis; and vertically on the thigh at the median of the iliac crest of the hip and the patella. In an obese person, at least one if not all of these measurements would exceed 60mm thereby rendering the test null and void. In addition, the use of body fat assessment gives the facilitators a factual, quantitative measurement by which to quantify pounds lost. For example, if a person weighing 300 lbs with 40% body fat loses 10 lbs over the course of 12 weeks, they are often discouraged. That 40% body fat equates to 120 lbs of fat on that person's body. However, if that person were to see the breakdown of the weight loss in terms of body composition, the loss takes on new meaning. While the person may have only lost 10 lbs, they may have had a change in body fat of 4% which equates to a 12 pound loss of fat alone. It is my belief that this kind of information is crucial to the participant in order to promote longevity. Pre- and post-program blood serum cholesterol testing and glucose testing would also help the

program facilitators to quantify the program and the person's success. It is also my belief that sub maximal stress testing, either on a bike or treadmill, would be an excellent preand posttest for the participants as it would not only inform the staff of the participants initial and post aerobic capacity but also would serve as a guide for the participant in terms of where they began and how much the hard work and exercise increased their capacity from start to finish. Ideally, a maximal stress test would be performed; however, this requires a physician to be present and is billable to insurance.

**Diverse exercise modalities:** Successful weight loss programs should offer and expose the participant to a variety of exercise modalities with their peers. It must be assumed that the participant is not familiar with the extensive variety of exercise available to them. Aqua aerobics, spinning classes, step aerobics, aerobic dance, walking, Yoga, Pilates and Tai Chi are all wonderful options in addition to taking up a sport or particular activity conducive to an overweight population. Many of the exercise modalities offered through UNC Wellness Center can be adapted for those who are physically disabled and/or in wheelchairs. While group fitness classes may not be the best option for those in this particular subgroup, much of the exercise equipment at UNC Wellness Center is accessible to these people and staff is always available and willing to aid them in any manner needed. Personal Trainers are also available for individual attention on both the exercise equipment and in the water. Personal Trainers also have access to the warm water therapy pool which is kept at 94-96 degrees. The level of exercise capacity of the participant should be considered when suggesting exercise modalities. Initial exercise testing would certainly help the program facilitators determine which kind of exercise modality would serve each participant best.

• Understanding and capable staff: This is just as important as the other aspects as it provides the participants with both a sounding board for problems encountered throughout the program and with making necessary changes to sustain weight loss. The staff should be knowledgeable of exercise and fitness as well as in nutrition and versed in current testing mechanisms and how to interpret and share the results. While I do believe it is better to have the program staffed by people who are familiar with weight gain and its accompanying struggles, it is not absolutely necessary.

#### The Role of the Facilitator

The facilitator for W2W has traditionally been a secondary one; the primary role of our administrative facilitators being administration. It has been secondary in focus as well because of the busy nature of everyday schedules for the administrators. The job description involves initial and post exercise testing, coaching the participants and leading exercise sessions and lectures during the 12-week program. After graduation, the facilitator takes on more of an external coaching role, meeting with the graduates once a month to discuss any issues they may be having with motivation, exercise, and diet. With a staff specifically designated to W2W, the role of facilitator will be expanded to include data collection, evaluation and follow up and even some recruitment. The new job description will allow for much more access to the personal coaches so that they can be available to the participants more than once a month. They will also be responsible for leading support group meetings twice a month rather than the current once a month schedule and will also be expected to increase attendance to those support group meetings by providing recipes, exercise homework or weekly challenges, interesting articles relevant to weight gain or loss, etc. It has even been suggested that the support group meetings be held

outside the Wellness Center on a few occasions or that during that meeting time, should weather permit, the group be led on a walk or outdoor activity. The facilitators will also be expected to move between the Wellness Center and the main hospital to provide simultaneous 12-week programs. It is my hope that by having exposure at the hospital, we can forge a much needed relationship with the Eating Disorders Clinic, Women's Hospital and Lineberger Cancer Center. Because of the increased duties and expanded job description, it is recommended that a small increase in pay be considered as well.

#### Recommendations

Through my observations and interviews with the current program facilitators and both current and former participants in W2W, I have compiled a list of recommendations that I feel will better the program overall for the participants as well as the Wellness Center staff. All interviews were done face to face with notes taken for accuracy. Conversations with former and current program participants were done in an informal setting; generally during a one on one Personal Training session with the client or during a lecture in which the participant asked questions or made comments about the program. The recommendations that follow were made as a result of comments I received from program participants and from interviews with current program facilitators.

- 1. Advertise W2W as a weight loss program, not a lifestyle modification program.
- 2. Make revisions to program staff and/or create a staff specifically for W2W.
- 3. Work "on" the program, not "in" the program.
- 4. Add hydrostatic weighing or testing with the Bod Pod to the pre- and post testing.
- 5. Create and maintain a consistent schedule of classes.

- 6. Offer the program 4 times a year
- 7. Expand the program to Hospital staff.
- 8. Evaluate both the program and the participants' success at regular intervals post graduation.

#### **Additional Information**

- Weigh To Wellness has been advertised as a Lifestyle Modification program in the past. This has to change as the facility does not have the resources or the staff at this time to provide for all aspects of Lifestyle Modification. The resources are available to UNC Wellness through UNC healthcare but the appropriate relationships with the Eating Disorders clinics and their staff have not been forged thus far. Advertising as a weight loss program reduces the confusion between the staff and the participants and allows for more focus on education for weight loss and techniques for lifestyle modification.
- Making revisions to the program staff would be ideal at this point. The current facilitators have all been there since the programs infancy and are burned out. In addition, all of the current program facilitators are in administration at the Wellness Center which is costly and unnecessary. In the past, there wasn't enough Wellness Center staff to allow for the program to do without the administrators. Currently the facilitators are comprised of the Lifestyle Enhancement Director, Health Education Director, Fitness Director, and two Registered Dieticians. There are also a few W2W coaches who are not in administration but who are employed by UNC Wellness Center. The Wellness

Center has numerous people interested in facilitating the program that are not in administration. They would be more cost effective to the Wellness Center and could provide fresh faces and new ideas to a program that needs upbeat people (see Appendix 1). Currently, three people have expressed interest in becoming facilitators; all three have a fantastic rapport with people, understand weight gain and weight loss both personally and professionally, and all three are interested in broadening their horizons in terms of working one on one with participants of W2W. Two have submitted letters to me personally requesting that they be included in W2W should the program change (see Appendix 2). There would be a man joining the facilitators for the first time and an African American female. It might also be beneficial for there to be a separate staff for W2W. This would allow for each participant to have greater access to their coach and Dietician whereas in the past, they have had to contend with the administrators' already busy schedules. If the program expands to UNC Hospital as well, a separate staff will be required as they will have to split their time between the Wellness Center and the main hospital. From a business perspective, this is the most cost effective way of changing Weigh To Wellness as it: 1.) creates longevity for unsalaried employees; 2.) reduces the cost of facilitating the program thereby allowing UNC Wellness Center's to offer more to the participants without raising the price of the program and thereby promoting their longevity as well; and 3.) providing a forum for program expansion without having to take employees who aren't as familiar with Weigh To Wellness to facilitate future expansions.

- When I met with the Director of UNC Wellness Center, he mentioned that he would like to see the facilitators working "on" the program rather than "in" it. By this, he meant that in the past, the facilitators of the program had been at every single meeting, every exercise session, every social event and at all testing, before and after the program. All of this responsibility was in addition to their everyday responsibilities as administrators. This contributed to the overwork of the program facilitators. The recommendation here would be to split the meetings, education sessions, and exercise between the program facilitators so that only one to two people are there each week instead of all facilitators. Or, if a staff is created solely for the purpose of W2W, they have the responsibility of attending all meetings, tests, etc. It is my belief that there is enough work to be done to allow for full time W2W employees.
- UNC Wellness Center has access to both a mobile hydrostatic weighing unit and the Bod Pod. While it is probably more convenient to have the mobile hydrostatic weighing come directly to the participants at the Wellness Center, it also has an additional cost at this time. The Bod Pod at the Exercise and Sports Science
   Department at UNC costs nothing to use but would require the participant to drive to the University and navigate campus and parking. A close look at the budget for Weigh To Wellness (Appendix 1) would have to be done in order to find out if the cost of the hydrostatic weighing could be built into the current price of the program with a staff change.
- The educational sessions offered for W2W should be consistent for each program. As it currently stands, many of the speakers who are not staff at the Wellness

Center cannot be counted on as regular participants of the educational staff. UNC Wellness does not have the kind of relationship with the UNC Eating Disorders Program that it has the potential to have and therefore does not have access to professors and psychologists there. I would like to see UNC Wellness forge that relationship so that we can utilize not only the Eating Disorders Program for our needy participants, but utilize the knowledge of the staff.

- W2W is currently offered twice a year for 12 weeks at a time. It is the hope of the Director of UNC Wellness that the program not only expands within the Wellness Center to four times a year but also that it expands into the kind of program that is mobile; a program that can be offered to the staff of UNC Hospital at the hospital. It is my belief that with new facilitators of W2W, the program will be much more mobile and versatile. If those changes result in permanent positions within and specific to W2W, there will be much more access to mobility in terms of where we offer the program and when we offer it. It has also been suggested that we offer lunch time programs and weekend programs for those people interested who cannot make it to the evening classes during the week.
- Program evaluations as well as evaluations of participant success are crucial to any program that wants to remain active and successful for long periods of time. As the program currently stands, there are no methods of regular evaluation on either front. Initial and post-program testing is done on the participants from whom statistics are gathered. Any weight loss is considered a success. Program evaluation forms are handed out on the last day of the program during a pot luck dinner for the participants in which they make dishes using the knowledge and

recipes from the program. This creates a tremendous amount of bias to the evaluation because the form is given out at a time when the participants are happy; they have accomplished personal goals, they have seen the program through to completion with their peers, and they are enjoying food. This is the only time the program is evaluated. It is my recommendation that each education session be evaluated with a simple form immediately after the lecture; the same would go for the exercise portion of the meeting. Both could be put on one form and handed out at the end of each session. Once the participant graduates from the program overall, evaluation forms should be sent out at 6 months post and at 12 months post. The purpose would be to see how well the education and exercise we provided worked to promote healthy changes in lifestyle that stood the test of time. If the participants have not maintained their weight loss or healthy habits for that matter, we could use the information provided to determine whether it was the program that failed over time or the person.

UNC Wellness Center at Meadowmont does not have the ability to offer all that encompasses a true Lifestyle Enhancement Program at this time. While the exercise testing and nutritional support is available (body fat percentage, stress testing for cardiac function, V02 max testing for exercise tolerance and endurance, circumference measurements, Basal Metabolic Rate testing), the staff is not available to offer stress management, emotional support in terms of psychological assessment and therapy, or smoking cessation. By not offering the latter mentioned components of an ideal program, UNC Wellness Center is able to keep the cost of the program low; however, I feel the overall benefit is decreased as well. We must then look at what it is UNC Wellness Center can offer their members and people from the surrounding community based on the resources available to them as well as the stated desires of the population they serve. More often than not, there is the search for a successful weight loss program. Successful weight loss programs must include lifestyle modification techniques, not merely techniques for changing diet and exercise alone. UNC Wellness Center can provide a weight loss program with lifestyle modification techniques built in.

The "look" of the program might also be considered for change. During one of my interviews with the director of UNC Wellness Center, it was expressed that there was some concern over the look of the program. All five of the current facilitators are very thin, very attractive women who have never struggled with weight. This, although not their fault, is a consideration to make because of the image it portrays to the participants. American society is one of media lust where the thin and beautiful are concerned, men and women alike. Everywhere we look we see billboards and photos of supermodels and winners of "The Biggest Loser" and we are all unconsciously expected to live up to the standard that is set by the few who represent this population of 'perfect people'. Unfortunately, this translates into all aspects of life, from grocery stores to exercise facilities. Those participating in W2W have already taken a big step where choosing to get help is concerned. It is often discouraging to those very people when they see the people who run the weight loss programs are thin and truly personally unfamiliar with the struggle of weight gain and subsequent desire to lose. Ideally, the facilitators of these programs would be fit and active and have the knowledge necessary to relate to the participants on a personal level. Regardless of the health and fitness levels of the facilitators, understanding must be practiced as well as an unconditional attitude towards the participants' current health and fitness status.

It is crucial to the Wellness Center that this program be a success for the participants and the staff. It is also crucial to the participants that the facilitators be on the same page regarding the program and get along with each other. When the facilitators are overworked and not getting along with one another, it can often translate to mistakes within the program scheduling, negative attitudes towards participating in the program events and condescension among individual facilitator's talents and knowledge. I feel that there are a few themes that must resonate throughout the program and that should be consistently worked on. Regular team building exercises would promote team work and therefore the ability to share the workload throughout the program. I strongly believe that becoming a Certified Wellness Coach would be beneficial. Wellness Coaching is a combination traditional life coaching, lifestyle fitness coaching, green living, sound nutrition, exercise and stress management. (The Spencer Institute: Certified Wellness Coaching, http://www.spencerinstitute.com/wellness-coach-certification-program.html) This certification has the potential to set the person apart from other fitness professionals. Leadership skills and skills conducive to having difficult conversations with both coworkers and participants should also be promoted. Tolerance and understanding should also be a consistent part of the program and continually practiced.

This is the part of the evaluation that I find the most difficult. I do not want to create problems among my coworkers as I believe they all have specific talents that are conducive to many wonderful things. I do, however, feel that I have an obligation as the program evaluator to provide an unbiased opinion as to what would work best overall for the Wellness Center, the program participants and the staff. As before mentioned, I spoke at length with each of the program facilitators separately about what they thought was best for the program overall; what they felt needed to stay, what they felt needed to go, and what they felt needed to be added to the program in terms of program material, staff, etc. The interviews were done separately to avoid any bias that another facilitator might introduce.

#### Conclusions

W2W has the potential to be a fantastic weight loss program once a few modifications are made. There is a tremendous need for the program both at the Wellness Center and at the hospital and I believe that if a staff is created specifically for that purpose it will be extremely successful. The hospital currently is using an outside vendor for its weight loss needs. It is a tremendous loss to UNC Wellness not to have the ability to provide that for them. It is my belief that with these modifications, we will be able to provide a better service to the hospital at a lesser cost than the outside vendor.

Staff changes are crucial within W2W to both eliminate the overwork of the current administrative facilitators and to provide a better-rounded, fresh-faced approach to the program. New facilitators need to be moved into the spaces currently occupied by administrative staff.

Initial and post-testing should be enhanced to include body fat measurement so that the staff and participants have quantitative data to use as a guide with participants. No qualitative data has been used in the past and would most likely provide useful information for the constant improvement of the program. Focus groups within participants and informant interviews would be fairly simple ways to accomplish this. Quantitative data, such as body composition testing is needed to best explain how the body can and does change differently in different people when exposed to dietary changes and physical activity. Weight loss is a very individual thing and needs to be expressed to each participant in that fashion.

Adding psychological assessments to the program will be a longer term goal. While I believe that assessing emotional and psychological reasons for over eating is a crucial aspect to any good lifestyle modification for weight loss program, UNC Wellness Center is not yet equipped to hire anyone in that capacity. If and when the time comes where UNC Wellness can hire someone for this purpose that resource will go beyond W2W into Cardiac Rehabilitation and perhaps employee concerns.

Minor changes to the program material should also be made; however, this is merely to provide for other education topics such as an informational session on surgical options for weight loss. While we certainly would not condone those options, it is a good idea to educate on what to truly expect post- gastric bypass or post-Lap Band surgery since most, if not all of the participants have at least considered one of these options. Most of the educational materials are wonderful in that they address pressing issues that people who are trying to lose weight are constantly concerned with such as going out to eat and the best way to maximize exercise time and have proven to be excellent in the past; however, having room to add important topics as technology and information change regarding weight loss is more about staying current and addressing realistic issues.

It is truly my hope that these suggestions, which have been based solely on data collection and direct observation at UNC Wellness Center, will be considered when looking at program modification. UNC Wellness has an obligation as a medical fitness facility to provide weight loss services and programs to the hospital and surrounding community in a manner that encourages success and maintenance.

## Appendix 1

# **Proposal Budget for W2W Program: administrator staff cost (Table 1) vs. cost for proposed staff changes for program facilitation (Table 2)**

**Table 1**—Current program cost with 5 Administrative staff as Program Facilitators. Note that all of the staff works part time in this budget.

Staff	Cost/hr	Total hrs/ week	Total hrs/ 12 wks	Total cost/ 12 wks	Cost of two 12- week programs per year	Cost of four 12-week programs per year
LED Director	\$25	6	72	\$1,800	\$3,600	\$7,200
Fitness	\$25	6	72	\$1,800		
Director					\$3,600	\$7,200
Registered Diet.	\$25	20	240	\$6,000		
Dieti					\$12,000	\$24,000
Registered Diet.	\$25	20	240	\$6,000		
Diet.					\$12,000	\$24,000
Health Ed.	\$25	6	72	\$1,800		
Director					\$3,600	\$7,200
Coach	\$17	4	48	\$816	\$1,632	\$3,264
Coach	\$17	4	48	\$816	\$1,632	\$3,264
Coach	\$17	4	48	\$816	\$1,632	\$3,264
TOTAL	\$176	70	840	\$19,848	\$39,696	\$79,392

Table 2.—Proposed budget for new Program Facilitators (part time vs. full time comparison)         NOTE: The final
overall cost (yellow box) is assuming everyone is full time. The green box is the overall cost if the non-
administrative facilitators are part time.

\*\$25/hr is assuming the current Administrative Staff assumes the role of coach in W2W. If Personal Trainers or other Fitness staff takes on the role of coach, the cost will be less.

\*\*\$15/hr is assuming the new position of W2W facilitator is a full-time, specific job, created for W2W and movable between the Wellness Center and the main hospital. The hourly rate was estimated high for budget purposes.

Staff	Cost/hr	Total hrs/week	Total hrs/week	Total hrs/12 weeks	Total Cost/12 weeks	Cost of two 12- week programs per year	Cost of four 12- week programs per year
Registered Dietician	\$25	40	40	480	\$12,000	\$24,000	\$48,000
Non admin. Facilitator 1	\$15**	20 (part time W2W)	40 (full time)	480	\$7,200	\$14,400	\$28,800
Non admin. Facilitator 2	\$15**	20 (part time W2W)	40 (full time)	480	\$7,200	\$14,400	\$28,800

Coach	\$25*	4		48	\$1,200		
			4			\$2,400	\$4,800
Coach	\$25*	4	4	48	\$1,200	\$2,400	\$4,800
Coach	\$25*	4	4	48	\$1,200	\$2,400	\$4,800
Total	\$130	92	132	1584	\$30000	\$60000	\$120000
					If two non admin. facilitators are part		
					time:		\$91200

The increase in overall money spent is due to the full time nature of the job. I have also asked that a small increase in pay be considered for the new W2W facilitators as their job description has also been expanded. It should be noted that while the cost of the staff may increase if the program is expanded to the hospital, the overall program participation will increase as well thereby increasing revenue to the Wellness Center. I did not include the cost of the program in the budget as the overall cost needs to be assessed to determine whether or not an increase is in order to accommodate further testing protocols such as the Bod Pod and/or Hydrostatic weighing. Further budget work will be done if the program recommendations are considered.

### Appendix 2

Letters from the two staff members who are interested in working for Weigh To Wellness full time.

February 22, 2010

To Whom It May Concern:

I have been fortunate to be able to work with many diverse groups of people while being employed with the UNC Wellness Center. Not only has my time here been a learning experience, it has also been an exciting, careerbuilding experience as well. The most gratifying element of my experience with The Wellness Center has been helping people with achieving their health and fitness goals.

I absolutely enjoy knowing that I have helped and been a part of someone overcoming certain barriers that have been placed in their lives. A key element that I have learned is that helping people achieve their health and fitness goals is not at all black and white; there are many areas of grey. These areas of grey include emotional and mental aspects of people's lives; which occasionally need to be handled with the utmost respect and care.

I strongly believe that The Weigh to Wellness Program here at The Wellness Center at Meadowmont falls into the previously mentioned grey area. This is an exceptional program that has helped many people and has the potential to only get better. I believe that the skills that I have with being able to relate and interact with people would make me a great addition to The Weigh to Wellness Program. Participants of this program need to be able to have access to people that can relate to their struggle and to have someone who will be empathetic as well as a great motivator in helping them to achieve their wellness goals. These Participants need a motivator who not only is able to convey to them "You Can Do This!", but to be able to tell them with absolute sincerity, "We Will Do This, TOGETHER!" Although I feel my being a part of The Weigh to Wellness Program will equally help me to grow and bring positive challenges to my professional career path as well. Thank you for this potential opportunity. I look forward to this new and wonderful experience.

Sincerely, (name withheld)

To Whom It May Concern:

The Weigh to Wellness program is designed to help those in need of a lifestyle change to improve ones health and overall quality of life. The types of people who participate in the Weigh to Wellness expect a program that is dedicated to their well being. This program should offer a service that is helpful to the participants, different than any other program available, and guarantees success.

I would like to be involved with the Weigh to Wellness program so I can provide the members the personal guidance that they need. The members need someone who will be motivating, understanding, and educate them throughout their experience in this program. I am someone who understands what it is like to struggle with lack of motivation to "live a healthy lifestyle"; therefore I can not only relate to the members but also help them create a solution to succeed.

The Weigh to Wellness is an excellent program that has even greater potential. The employees that are involved in Weigh to Wellness are obviously passionate about health and fitness and want to express that by helping other people. I would love to be a part of that team and utilize my knowledge and concern for the health of others.

Sincerely,

(name withheld)

## Appendix 3

Questions asked to current administrative program facilitators in order to obtain information about the inner workings of W2W from their point of view. This information, along with information from participants of W2W, allowed me to make many recommendations. Interviews took place the week of February 1, 2010 at UNC Wellness Center. All program facilitators were interviewed separately to reduce bias.

- 1. What do you like about the current program?
- 2. What, if anything, do you feel could or should change about the current program?
- 3. What methods of evaluation are you currently using to track participants after graduation?
- 4. What methods of evaluation are you using to look at the program itself and how often are you evaluating?
- 5. What methods of evaluation are you using to evaluate yourselves in terms of effectiveness and the ability to reach participants?
- 6. Is there a specific "look" to the program that you are trying to achieve?
- 7. Do you have program statistics? If so, can I get a copy of them?
- 8. What kinds of testing are done initially to participants entering the program?
- 9. Is the same testing done after program completion?
- 10. Is the same person doing the pre- and post-testing with the participant?
- 11. Are there any additional testing protocols you would like to see utilized in pre- and posttesting for participants?
- 12. Is there any testing you feel could be left out or replaced with something more efficacious?

- 13. How many people do you find drop out of the program before its completion?
- 14. Have you seen people sign up for the program multiple times?
- 15. What are the major complaints from participants throughout the program?
- 16. What are the major complaints from participants after the program is finished?
- 17. Why are five managers/administrators running the program now for 5+ years?
- 18. Would it be less expensive for the participants if five UNC Wellness Center administrators were not running Weigh To Wellness?
- 19. Do all of you want to remain as facilitators for the current program?
- 20. If not, is there anyone you would recommend working at UNC Wellness that would be a good match for the program?
- 21. Is this a weight loss program or a lifestyle enhancement program?
- 22. What do the participants receive for the price they are paying for the program?
- 23. Would the program price increase if you were to add more programming/testing protocols?
- 24. Are the participants happy with what they get for the price?
- 25. Are you, the facilitators, happy with what the participants get for the price?
- 26. You offer the program twice a year. Do you have a demand for more than that?
- 27. Do you have the staff for more than that?

### References:

- 1. The Centers for Disease Control and Prevention: obesity statistics. http://www.cdc.gov/obesity/index.html
- 2. Centers for Disease Control and Prevention: Fat Stats, http://www.cdc.gov/nchs/fastats/overwt.htm
- 3. Love To Know: Diet, Obesity Statistics: <u>http://diet.lovetoknow.com/wiki/Cures\_for\_Emotional\_Eating</u>
- 4. Life Measurement Products, <u>http://www.lifemeasurement.com/products/overviewBodpod</u>
- 5. Body Fat Test Mobile Lab <u>http://www.bodyfattest.com/the-mobile-lab.html</u>
- The Division of Nutrition, Physical Activity and Obesity (DNPAO), <u>http://www.cdc.gov/nccdphp/dnpao/index.html</u>
- 7. UNC Wellness Center Membership Plans, http://www.uncwellness.com/membershipplans.htm
- 8. The Spencer Institute: Certified Wellness Coaching, http://www.spencerinstitute.com/wellness-coach-certification-program.html