

**PHYSIOLOGICAL AND PSYCHOLOGICAL EFFECTS OF OVERWEIGHT  
HETEROSEXUAL WOMEN ON THEIR ORGASMIC RESPONSE**

**BY**

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**A DISSERTATION SUBMITTED TO THE FACULTY OF THE AMERICAN  
ACADEMY OF CLINICAL SEXOLOGISTS  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF DOCTOR IN PHILOSOPHY**

**ORLANDO, FLORIDA.**

## DISSERTATION APPROVAL

This dissertation submitted by Odalys J. Waugh has been read and approved by three committee members of the American Academy of Clinical Sexologists.

The final copies have been examined by the Dissertation Committee and the signatures which appear here verify the fact that any necessary changes have been incorporated and that the dissertation is now given the final approval with reference to content, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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## ACKNOWLEDGEMENT

The learning process, dedication, enthusiasm and many hours of work researching are now significantly important after completion of this work. The obstacles encountered during the research process are no longer important. Working in this dissertation research provided me with a great sense of responsibility and accomplishment; I have learned to respect myself as a professional clinical sexologist.

As an individual I have grown to understand my life, and those in my life that supported me, especially my husband Donald that listened to my many arguments, many ideas and sacrificed himself in many occasions when I had to work in this project. My daughter Raquel has been the light of my life, the inspiration and the motivation. She makes me feel special at all times. My daughter Raquel appreciates and values the work I do, she makes sure to express her feelings of love and support. She has been available to help me in various instances and understand my frustrations. They are both my inspiration and they have been my support in every project and every goal that I wanted to reach.

I want to thank my mother, for giving me the opportunity to be in this world, to learn from her strong personality, her values and because she has always been by my side helping, guiding me and inspiring my life. I am very grateful for her vision and appreciation to all my career goals.

My Dissertation Committee was always supportive, understanding and guidance throughout this process. I want to thank Dr. Anagloria Mora and Dr. Sonia Blasco as I learned from their motivation and dedication to their work as sexologists and the sexology field respectfully. Their help was very valuable and will be valuable in my heart forever. I thank Dr. William Granzig for his support and for understanding my difficulties throughout this process. I am grateful to him for the knowledge he provided during my education in this program.

## VITA

Odalys was born in Havana, Cuba. At a very early age the family moved to Madrid, Spain and she grew up with many wonderful friends at a great school. She became popular at school and soon was able to receive her teacher's recognition for great acting in the school play. After that she was always involved in all the artistic activities and other theatrical events at school as well as in the community. Odalys believed for a long time that she would become a famous actress or singer. Instead, Odalys became a tour guide working in Spain and European countries and continued this career after she moved to Miami in 1985.

Her life changed drastically in 1993, she was able to follow her dreams to go back to school. And in 1998 Completed her Bachelor's degree in Liberal Studies with a concentration in Psychology at Barry University. She then received a Master's degree in Counseling in 2002 with a dual concentration: 1- Mental Health Counseling and 2- Marriage and Family Therapy. She is currently a doctoral (PhD) Candidate in Sexology at the American Academy of Clinical Sexologists, Orlando, Florida. Odalys is a Licensed Mental Health Counselor in the State of Florida, a Certified Counselor in Clinical Sexology from the American Academy of Clinical Sexologists and a Diplomate of the American Board of Sexology.

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## ABSTRACT

This dissertation researched the physiological and psychological effects of overweight heterosexual women on their orgasmic response. The demands that society poses on women to be thin and attractive, places overweight women at risk for low self-esteem and poor body image. In addition, being overweight may have implications on general health that include hormonal changes and deficiencies, which are closely linked to the arousal and orgasmic response. These areas of the research findings provide a comprehensive understanding of how women's sexuality and specifically their ability to be orgasmic, is of major concern for the overweight women. This research study is supported by a literature review on the following topics: Western View of Female Ideal Body Weight, Physiological Effects of overweight, Effects of overweight in general health conditions, Influence of body fat in the hormonal reaction, Psychological Effects of being overweight, Impact on Self Image and Self Esteem, Sexual Response Cycle (Desire, Excitement, Plateau, Orgasm and Resolution).

For further support and clarification of this study, the terms Overweight, Orgasm, Heterosexual and Self Image are defined as they are used within this dissertation.

The sample selection for this descriptive research design was obtained through a snowball sampling technique in Miami Dade County, Florida. The sample consisted of fifty two overweight women Anglo-American, African America, Native American and from the following countries: Haiti, Cuba, Colombia, Spain, Peru, Argentina and Chile. All the participants were twenty years old or older. Ages of the participants ranged from 21 to 58 years. Their level of education ranged from High School Graduate to Post Graduate School. Women who participated in the study have self-identified as being overweight and verification of their weight was conducted by this researcher as well. All participants are married or in a live-in romantic and sexual relationship.

The researcher personally interviewed all participants. Participants were explained the purpose of the study and were assured their identities would be kept confidential. The participants were encouraged to answer the questions sincerely. The survey questionnaire was provided to the participants in English. All participants spoke perfect English and were monolingual or bilingual. They all felt comfortable answering the questions. All the participants discussed and revealed details of how their situation with body weight was affecting their relationship.

The survey questionnaire included questions regarding demographics. Upon completion of the survey questionnaire, participants were given the opportunity to openly share their experiences with the interviewer. This study presents descriptive data as provided. Data was gathered and a qualitative analysis was drawn from the responses as received and collected.

The intention of this study is to obtain a complete understanding of all the effects that being overweight have on women and their sexuality. The main purpose of this research study is to promote more research in this area in order to find proper treatment and changes in our society regarding female body image as a leading cause of anorgasmia in overweight women. Additionally, this study is intended to foster awareness for further research to create interventions and treatment tools that sex therapists and mental health professionals can apply.

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## Chapter 1: INTRODUCTION

Sexuality is an important aspect of the human emotional and physical states of health and well being. As Langfeldt and Porter (1986) states “Sexuality is the energy that motivates us to find love, contact, feel warmth, and intimacy it is expressed in the way we feel, move, touch and are touched” (Coleman 2002, 1). Recognizing situations that affect sexual functioning and dysfunction, and helping to implement effective coping strategies are primary goals of the professional clinical sexologist.

Throughout the years, and justified by many studies (Wiederman. 2000; Frederickson & Roberts 1997) it has been acknowledged that Western culture has influenced women’s acceptance of their beauty and body weight. Studies show that socially successful women are thin and beautiful. This attractive and beautiful female becomes the normative standard used by many studies to understand issues affecting women’s sexual well-being (Frederickson and Roberts 1997; Wiederman 2000).

Recent studies have focused on the earlier ignored overweight woman. Research results show that attractive, beautiful and slender women demonstrate success in engaging in new relationships (McCabe and Monteath 1997). Empirical studies show that the media in Western countries illustrate the female body ideal as being thin (Myers and Biocca 1992). Popular magazines such as Cosmopolitan, Glamour and People contain 10.5 times more articles relating to body weight than do magazines targeted at male audiences (Andersen and DiDomenico 1992). Researchers believe that these media messages promoting thinness are internalized by women from Western countries as well as internationally. As a result; being slender has become the goal that women strive for in order to achieve sexual success. (Myers and Biocca 1992).

“Attractive women date more frequently, have more sexually permissive attitudes, engage in a greater variety of sexual activities, and have sexual intercourse at an earlier age than

do unattractive women.” (Sing 2004, 1). Sing added, "An alternative explanation would be that attractive females do, at least occasionally, engage in behaviors that are not held in high regard, thereby giving the 'darker side of beauty' some basis in truth" (Sing 2004, 1).

Current research presented by (Chernin 1985; Goodman 1995; Waxler and Liska 1975) informed that overweight women are seen as lazy, sexless, ugly, self-indulgent, and sloppy also regarded as physically unhealthy (Sobal and Maurer 1999). This researcher is compelled to ask: how and in what way are these messages affecting the orgasmic response of overweight women?

In the United States, being overweight equals being unattractive (Sobal & Maurer 1999). Western culture has internalized the media messages that continuously declare that beauty, success, happiness, wealth, love, and sexuality come with slimness (Fallon 1990; Orbach 1982).

Research studies suggest a correlation between being overweight and how overweight women feel about their lives regarding having satisfactory romantic relationships, their educational goals, or work. Overweight women experience a lower life satisfaction according to this study (Ball, Crawford and Kenardy 2004).

A study in 2004 conducted at Duke University’s Duke Diet and Fitness Center Binks reported on the sexual quality of life and sexual problems occurring in overweight individuals. In this study women described difficulties with their orgasmic response as their primary sexual complaint more frequently than the male participants in the same study. The study found "At the beginning of the trial, both male and female participants indicated that they were experiencing significant difficulty in all areas of sexual quality of life" (Binks 2004, 474). According to this study, after losing only 10 percent of their total body weight, individuals improved their sexual quality of life. Sixty-seven percent of the women said they felt sexually unattractive at the start “that prevalence dropped to 26.4 percent one year later and remained stable” (www.longlifeclub.com).

In another interview, Binks offered his findings and concerns, “People who are struggling with their weight must not make their weight problem define who they are”. “They are entitled to have the same quality of life as anyone else” (www.webmd.com).

Frederickson and Roberts (1997) argued “Women who place more emphasis on their appearance, or demonstrate a higher degree of appearance orientation, may have incorporated to a greater degree the cultural objectification of women's bodies” (Wiederman and Hurst 1998, 2). “As a result, women high in appearance orientation may be more prone to experiencing self-consciousness regarding how their body appears to others” (Wiederman and Hurst 1998, 2).

“Self-image is a major contributor to a healthy sexual expression” (Widerman and Hurst 1998, 2). In a Kinsey study, “women reported that a sense of well being was most important in determining sexual happiness. Orgasm and other sexual physical responses ranked fourth in importance to sexual happiness” (Kinsey, Pomeroy, Martin, Gebhard 1953, 351).

Overweight women do not have the same opportunities to date or to have an active sexual lifestyle as women who are of standard weight or less (Wiederman and Hurst 1998). Overweight women, as research shows, feel pressured by Western culture to be of standardized weight or less. Overweight women resist settings in which they feel men will scrutinize them. Because of their resistance, they provide themselves less opportunities for heterosexual involvement. “Because they afford themselves less opportunity, overweight women have relatively less sexual experience and lower sexual esteem” (Wiederman & Hurst 1998, 1).

Larger women are stigmatized especially with regard to sexuality and courtship (Wiederman & Hurst 1998); Women's general body dissatisfaction is typically measured according to self perceptions of being too heavy or having particular body parts that are "too large" (Regan 1996; Sobal, Nicopolopoulos and Less 1995). Many studies Karen and Doughty (1984), Schumaker, Krejci, Small and Sargent (1985), Tiggermann and Rothblum (1988) argue

that “Because of this self perception, they have decreased opportunities for heterosexual dating” (Wiederman, 2000, 1).

Physical attractiveness and body image are beliefs that make sense when it comes to sex (Daninluk 1993). Women who had a relatively higher BMI than the average woman in the study, and were rated as less facially attractive by the experimenters, were less likely to be involved in a steady dating relationship, or to have had sexual intercourse. Overweight women were less likely to have received oral sex from a man. Women rated as less facially attractive were less likely to have performed oral sex on a man (Widerman and Hurst 1998).

It is probable that women with a critical body image and self-consciousness are less likely to experience an orgasm or to have a satisfactory sexual experience (Wiederman 2000). To the extent that any form of cognitive distraction results in sexual dysfunction (Masters and Johnson 1966), “one can expect that increased body image self-consciousness will result in problematic sexual interactions” (Wiederman 2000, 13).

In addition to the Western culture’s bias against overweight women, it is important to review the physiological impact of being overweight on a woman’s sexuality.

According to Susan Kellogg, PhD, Director of Sexual Medicine at The Pelvic & Sexual Health Institute in Philadelphia, PA “We are beginning to see that the width of the blood vessels leading to the clitoris [the area of the vagina most closely related to sexual response] in women are affected by the same kind of blockages that impact blood flow to the penis. When this happens a woman's body is far less responsive, and a drop in desire is not far behind.” (Binks 2004, 2).

Also, when an individual has more body fat there are higher levels of a natural chemical known as Sex Hormone Binding Globulin (SHBG). It's aptly named because this hormone binds to the sex hormone testosterone. Doctors theorize that the more testosterone that is bound to SHBG, the less testosterone there is available to stimulate desire (<http://onhealth.webmd.com>).

“SHBG greatly influences the bioavailable testosterone level because it binds with high affinity to a large fraction of the testosterone in circulation. Albumin binds a high percentage of the testosterone with low affinity, and another hormone carrier protein, cortisone binding globulin binds with low affinity to less than 1% of the testosterone population” ([www.dpcweb.com](http://www.dpcweb.com)).

Science provides answers to understanding the capacity to enjoy a healthy sexuality. Female sexual orgasmic response first occurs in the brain. The septal region and the ventral segmental area are located in the brainstem. Inside the septal region there are four centers for orgasm in females. The hypothalamus plays a major role in controlling the production of sex hormones ([www.arhp.org](http://www.arhp.org)).

“Estrogen produced in the ovaries, is responsible for maintaining lubrication in the vagina” (Masters, Johnson, and Kolodny 1980, 60). Also, estrogen is responsible for producing a sexual scent that accompanies women. This scent attracts the man during a sexual encounter, making the woman that much more attractive to him. (Crenshaw 1996, 167).

There are other opinions that take a serious stance regarding this issue they believe that self-esteem is the solution to this problem, "When your self-esteem is good, you will be able to deal with your weight realistically. You will be able to stick to a regime of acceptable caloric intake, because you will feel good at seeing the weight come off and enjoy the social recognition that you will achieve through the process, or you will accept yourself the way you are and not be

concerned about the excess weight as long as you maintain your health and well-being"  
(Steffenhagen 1987, 107).

The literature suggests that an overweight heterosexual female's sexuality does not offer the same opportunities for her as for a woman who is of a standardized weight or less. The combination of psychological influences, societal influences, and physiological influences appear to converge and affect the overweight woman's ability to reach an orgasm.

Overweight women, for the purpose of this study, are defined as those with a weight of more than 25% above what is considered normal according to standard age, height, and weight tables. In this study the body mass index table (BMI) will be utilized to define our sample.

This research study will present information from overweight heterosexual women. The answers will be recorded and analyzed. These answers will generate a picture of the overweight woman's perception on her orgasmic response.

## Chapter 2: DEFINITION OF TERMS

For the purpose of this research the following definitions are incorporated.

### **Overweight**

Overweight is defined as the property of excessive fatness ([www.answers.com](http://www.answers.com)); being overweight generally indicates that an individual has more body fat than is typical or required for the normal functioning of the body. Being overweight is a fairly common condition for many people, especially in the United States and other developed nations where food supplies are plentiful and lifestyles often do not involve a lot of exercise. Recent studies have indicated that as much as 64% of the adult US population is overweight, and this number is increasing. ([www.answers.com](http://www.answers.com)).

According to Weight Control Information Network, “Overweight refers to an excess of body weight compared to set standards. The excess weight may come from muscle, bone, fat, and/or body water. Obesity refers specifically to having an abnormally high proportion of body fat.[1] A person can be overweight without being obese, as in the example of a bodybuilder or other athlete who has a lot of muscle. However, many people who are overweight are also obese” (<http://win.niddk.nih.gov>).

The National Institutes of Health (NIH) utilizes the BMI (the body mass index). The BMI is the standard table of measuring weight used in the United States. The body mass index calculates a person's weight divided by their height, See Appendix A (<http://www.nhlbisupport.com>).

When defining overweight, it is understood by the professional that the individual's Body Mass Index (BMI) is 27.3 % or more in females. In the past, there were other forms used to

measure body weight: The National Health and Nutrition Examination Survey (NHANES), and standards, such as the Metropolitan Life Insurance Company (MLIC) tables from The American Society for Clinical Nutrition informed in 2000. ([www.ascn.org](http://www.ascn.org)).

For the purpose of this paper, the terms overweight and overweight women is referring to the standard set by reference values, which is measured by the Body Mass Index.

### **Orgasm**

*Orgasm* relates to how the individual arrives at the sexual climax. The word orgasm comes from the Greek word *orgainein* meaning to swell, as to swell with lust. ([www.medterms.com](http://www.medterms.com)).

For women, orgasm has remained a mystery compared with the more frequent and easily achieved male orgasm. In terms of evolution and adaptation, women do not need to experience orgasm in order to reproduce. So what is the function of orgasm in women? (Cardoso 1997) found in (<http://www.epub.org>).

“Orgasm, also called climax, is a physiological state of heightened sexual excitement and gratification that is followed by relaxation of sexual tensions and the body's muscles. It is marked by a feeling of sudden and intense pleasure” (Cardoso 1997, 8) found in (<http://www.epub.org>).

Master and Johnson researched extensively:

The orgasm occurs when a series of involuntary muscle spasms and contractions in the area of the anus, lower pelvic muscles, and sexual organs, is produced, accompanied by a sudden release of endorphins providing a feeling of euphoria. Particularly in the female, an orgasm is preceded by moistening of the vaginal walls and enlargement of the clitoris. The vagina decreases in size by about a third and there are rhythmic contractions of the



uterus, vagina and pelvic muscles. After orgasm, the clitoris emerges from under the clitoral hood and returns to its normal size. Unlike men, women do not have a refractory period (Master and Johnson 1966, 108).

“Also called Climax, climactic physiological state of heightened sexual excitement and gratification that is followed by relaxation of sexual tensions and body’s muscles. Orgasm is marked by a feeling of sudden and intense pleasure, an abrupt increase in pulse rate and blood pressure, and spasms of the pelvic muscles that cause contractions of the lower vagina”

([www.britannica.com](http://www.britannica.com)).

“Orgasm is an expression for a sexual peak-experience by most women accompanied by involuntary muscle activity in the pelvis-bottom. The patients are the ones to judge whether they experience an orgasm” (Hulter and Lundberg 1994, 171).

### **Heterosexuality**

The term heterosexual comes from the Greek word heteros, meaning “different”. The term heterosexual was coined shortly after and opposite to the word “homosexual” by Karl Maria Kertbeny in 1868. Heterosexual was first listed in Merriam Webster’s New International Dictionary as a medical term for “morbid sexual passion for one of the opposite sex” (<http://en.wikipedia.org>).

Heterosexuality is a term primarily utilized regarding aesthetic, sexual, and romantic attraction occurring exclusively between two individuals of opposite genders. It is characterized as a sexual orientation, contrasted with homosexuality and bisexuality. Heterosexual is characterized by a tendency to direct sexual desire toward the opposite sex, of relating to, or involving sexual intercourse between individuals of opposite sex Merriam Webster’s Online Dictionary (<http://www.m-w.com>).

As per Hogan and Hudson (1998) "Heterosexuality is broadly defined and it loosely implies female-to-male or male-to-female sexual desire and/or sexual behavior" (Mora 2005, 1).

### **Self-Image**

Self-image has been defined as the "total subjective perception of oneself, including an image of one's body and impressions of one's personality, capabilities, and so on" this is another term for self-concept. (<http://www.jablifescills.com>). "Several other psychologists have said that one's self-image is one's mental picture, one's physical appearance, and the integration of one's experiences, desires, and feelings. measurable things. (<http://www.jablifescills.com>)

Self Image is a feeling of pride in yourself, the quality of being worthy of esteem or respect. The opinion that you have of your own worth, attractiveness, or intelligence (<http://encarta.msn.com>)

### **Self-Esteem**

Esteem is a favorable opinion; therefore self-esteem is a favorable opinion of oneself. Self esteem, or lack of, is simply an opinion. To change this opinion, it is necessary to change the individual's self-image ([www.Self-Improvement.org.uk](http://www.Self-Improvement.org.uk)). A person's self-image at an emotional level; circumventing reason and logic. The term differs from ego in that the ego is a more artificial aspect; one can remain highly egotistical, while underneath have very low self-esteem. (<http://www.reference.com>).

The National association for self-esteem views Self-esteem and defines it as follows: "Self-esteem stems from the experience of living consciously and might be viewed as a person's overall judgment of himself or herself pertaining to self-competence and self-worth based on

reality” ([www.self-esteem-nase.org](http://www.self-esteem-nase.org)). "The totality of the individual's perception of self, the self-concept/mental, self-image/physical, and social concept/social at increasingly abstract levels of being." (Steffenhagen 1987, 181).

Much is written about self-esteem; nevertheless, Nathaniel Branden pioneer in the field of self-esteem declares “Self-esteem is confidence in our ability to think, confidence in our ability to cope with the basic challenges of life; and confidence in our right to be successful and happy, the feeling of being worthy, deserving, entitled to assert our needs and wants, achieve our values, and enjoy the fruits of our efforts” (Branden 1994, 4).

## Chapter 3: LITERATURE REVIEW

### Western View of Female Ideal Body Weight

“To men a man is but a mind. Who cares what face he carries or what he wears? But a woman’s body is the woman”  
(Bierce 1958).

Freedman (1986) stated “Since the height of the feminist movement in the early 1970s, women have spent more money than ever before on products and treatments designed to make them beautiful. Attractiveness is a qualification for women not for men” (Cohen 2001) [found in www.healingthehumanspirit.com](http://www.healingthehumanspirit.com).

Wolf (1991) is able to establish that men understand women as basic and simple “beauties” because it allows men to maintain their view that the true essence of their culture is male. When women attempt to transform culture by showing a rebellious nature and a personality of their own, men categorically reject the transformation. Because of this, women continue to embrace a more pleasing, pure, harmless, and innocent posture (Wolf 1991, 25).

From the beginning of civilization, throughout different cultures, the society in which women have lived have thought of different ways to take control over women’s ideal body image and concept of beauty (Wolf 1991). The concept of beauty has changed over time and by various cultures. In *The Beauty Myth*, Wolf discusses the impact of the male-dominated society. “The interpretation of beauty is a creation of society” (Wolf 1991, 27).

In the 18<sup>th</sup> century, the idealized colonial woman was muscular, big, and strong. It was a period in history when it was important for women to have these attributes because women supported and helped build the country. However, this image did not last. During the 19<sup>th</sup> century, the ideal body image changed. Women became thin, frail, and prone to faint (Cohen 2001). The corset, an earlier tool for beauty in Europe, became a tool for women in the United

States and other Western countries it was designed to narrow the middle area of the woman's body.

“Since the industrial revolution, middle class western women have been controlled by ideals and stereotypes as much as by material constraints” (Wolf 1991, 15). We have seen the focus of attention on women's bodies continue: the tiny waist of the Victorian times, the boyish figure during the flapper era, the voluptuous image of the female of the 1930s through the 1950s. Today, once again, it has become popular and important to be thin.

(<http://zine.dal.net/previousissues/issue18/editorial-life-thin.php>.)

As reported by Saltzberg and Chrisler, many important changes to a woman's body Image has occurred during the twentieth century:

The ideal female body has changed several times, and American women have struggled to change along with it. In the 1920s, the ideal had slender legs and hips, small breasts, and bobbed hair and was physically and socially active. Women removed the stuffing from their bodices and bound their breasts to appear young and boyish. In the 1940s and 1950s, the ideal returned to the hourglass shape. Marilyn Monroe was considered the epitome of the voluptuous and fleshy yet naive and childlike ideal. In the 1960s, the ideal had a youthful, thin, lean body and long, straight hair. American women dieted relentlessly in an attempt to emulate the tall, thin, teenage model Twiggy, who personified the 1960s' beauty ideal.” (Saltzberg and Chrisler 1995, 3).

During the twentieth century, there was a period in which women were able to relax about their weight. “In the regressive 1950s women's natural fullness could be briefly enjoyed once more because their minds were occupied in domestic seclusion” (Wolf 1991, 184). Then a drastic change occurred. “In 1954, Miss America was 5'8” and weighed 132 pounds. Today, the average Miss America contestant stands at 5'8” tall and weighs just 117 pounds” (Callaghan 1994, 5).

Callaghan 1994 argued that:

A woman's self-esteem is greatly affected if she learns to value herself through the eyes and values of society. Society defines the way a woman feels about her body, and this message communicates the experience of being a woman in that society. How good or how bad a woman may be is based on the woman's appearance. This has led to the development of dual interpretations, in which women feel they have to choose between being good and respectable and/or decent and beautiful. If a woman is unable to fit the definition of good, respectable, or beautiful, feelings of inadequacy could emerge (114).

Women discipline themselves and work hard on their appearance and body image with the intention of receiving the approval and acceptance of society and the formation of this image is how women create their identity (Hesse-Biber 1997). Schwartz (1986) informed "Physical costs include the pain of ancient beauty rituals such as tattooing, nose and ear piercing, as well as more modern rituals such as wearing pointy-toed, high-heeled shoes, tight jeans, and sleeping with one's hair in curlers (Saltzberg and Chrisler 1995, 3). The Side effects of beauty rituals have negatively affected the lives of many women, from the tattooing and ear piercing with unsanitary instruments in which women contracted serious, sometimes fatal, infections to the toxic chemicals in cosmetics that caused the death of many other women (Saltzberg and Chrisler 1995, 3).

Baker (1984) reviewed how the corsets caused injuries and the lives of women during those days. "The corsets were made of whalebone and hardened canvas with a piece of metal or wood that ran down the front to flatten women's breasts and abdomen. This garment made it impossible to bend at the waist and difficult to breathe. Pulmonary disease and internal organ damage was often the result of wearing the corset" (Saltzberg and Chrisler 1995, 3).

Todd (1984) "This was a time when the family unit was everything and it was a women's duty to bear lots of children, obey her husband (and men in general) and keep her mouth shut" (Cohen 2001) found in ([www.healingthehumanspirit.com/pages/body\\_img.htm](http://www.healingthehumanspirit.com/pages/body_img.htm)).

As a new country, America was always transforming, and the many changes in the 20<sup>th</sup> century made it difficult for women to constantly renovate. Twiggy appeared in the pages of

*Vogue* in 1965 and other important events beneficial to women happened, for example, the advent of the pill (Wolf 1991). However, being thin was very important. In those days doctors ordered pregnant women to be on a diet and not to gain more than twenty pounds during the entire pregnancy, these orders were later rejected as they were unsafe (Fallon 1990).

Freedman (1988) “In recent decades instructions for beauty gave women the opportunity to use an erotic sophistication with a naive innocence as well as a delicate grace with muscular athleticism” (Cohen 2001) found in ([www.healingthehumanspirit.com/pages/body\\_img.htm](http://www.healingthehumanspirit.com/pages/body_img.htm)).

Boskind-White and White (1983) “No matter what the historical period, the common denominator for women has been to conform” (Cohen 2001) found in ([www.healingthehumanspirit.com/pages/body\\_img.htm](http://www.healingthehumanspirit.com/pages/body_img.htm)). “During the past decade, women breached the power structure; meanwhile, eating disorders rose exponentially and cosmetic surgery became the fastest-growing medical specialty” (Wolf 1991, 10). Women have become insecure by allowing media dictate their beauty, the way they accept themselves physically, and this has led to an increase and popularity of plastic surgery. Women believe they need to conform to men’s desires including believing that having small breasts is not attractive and they made use more and more of the breast implants (Saltzberg and Chrisler 1995).

“Thirty-three thousand American women told researchers that they would rather lose ten to fifteen pounds than achieve any other goal” (Wolf 1991, 10). Today women deal with many obstacles when trying to create their image. It is very difficult and highly stressful and in many cases this has resulted in a large majority of American women having negative body images (Dworkin and Kerr 1987; Rosen, Saltzberg, and Srebnik 1989). “Many are ashamed to admit that such trivial concerns-to do with physical appearance, bodies, faces, hair, clothes-matter so much” (Wolf 1991, 9). Women considered themselves to have an obsession with looks and had concerns regarding their liberations as well as their beauty (Wolf 1991).

“Between 1966 and 1969, two studies showed the number of high school girls who thought they were too fat had risen from 50 to 80 percent” (Wolf 1991, 185). Dissatisfaction with their bodies is very common among adolescent girls (Saltzberg and Chrisler 1995, 3). In 1991 reports all over the news discussed the issue of self-esteem in American teenage girls. The report, commissioned by the American Association of University Women, declared: “Little girls lose their self-esteem on their way to adolescence, study finds” (Hoff-Sommers 1995, 137).

For women virtue is important; beauty becomes then a matter of virtue. “The notion that virtue for women lies in self-sacrifice has complicated the course of women’s development by pitting the moral issue of goodness against the adult questions of responsibility and choice” (Gilligan 1996, 133).

The way that women feel pressured to become thin has been closely related to the increasing incidence of anorexia nervosa and bulimia among women (Brumberg 1988; Caskey 1986; Saltzberg and Chrisler 1995) “One million Americans suffer from the above mentioned eating disorders; 95% of them are women” Saltzberg and Chrisler 1995, 3).

Bell (1985) declares “Cases of anorexia nervosa have been reported in the medical literature for hundreds of years” (Saltzberg and Chrisler 1995, 3). Anorexia at that time was an unknown disorder until the rapid increase in these cases made it popular and brought it to public awareness. According to Brumberg (1988) “Today’s anorexics are also thinner than they were in the past” (Saltzberg and Chrisler 1995, 3).

“Women are acutely aware of the double standard of attractiveness” (Saltzberg and Chrisler 1995, 3). Pliner, Chaiken, & Flett (1990) argue that “Growing up, women learned to be appealing to men, how important it is to achieve and maintain the standards for weight and physical appearance; however, this affected women’s self-esteem. The most feminine women



are troubled by their appearance and have the lowest self-esteem” (Saltzberg and Chrisler 1995, 3).

Trethewey (1999) debates how the reality of women is guided toward a concept of beauty at a very early age. “Women learn as young children to control their bodies in distinctly feminine ways” (1). Through visual images and media messages women learn the rules of beauty and learn to apply them to themselves accordingly. Women become more docile as they focus so much more on their physical appearance and female behavior (Bordo 1989).

It is not surprising that the dangerous effects reflected in the studies on how body image in Western Countries is producing negative health effects for women. “American women have the most negative body image of any culture studied by the Kinsey Institute” (Faludi 1991). According to an article from the Colorado State University Kendall, P. (1999) argues that for the new millennium females will struggle with their body image and it is not very optimistic “With both eating disorders and obesity on the rise, it is clear that many American women are striving for unattainable goals. With an ideal that’s constantly changing, women are becoming even more frustrated with their weight and other body image issues” (P. 1) ([www.lilithgallery.com/feminist/anorexia/anorexic004-ImageIdeal.html](http://www.lilithgallery.com/feminist/anorexia/anorexic004-ImageIdeal.html)).

Women’s sexual esteem also has had an impact throughout history in western countries. When discussing female sexuality, history shows great confusion. The popular demand dictated to women that it was necessary to show their sexuality carefully. If a woman’s desire was not showed to men, she was labeled as being frigid, cold, detached (Bordo 1993). On the other hand, sexually experienced women became a threat to men’s sexuality. “In dominant cultures, a woman’s desire has a dangerous side” (Bordo 1993, 105).

Other reasons influenced why women worried about their weight. In society a woman's appetite was symbolic of desire "An overweight woman would be identified as women that has a voracious appetite for food and for sex" (Bordo 1993, 105).

Of equal importance is the historical information regarding the spiritual connection of body, weight, and beauty. Bell (1985), Brunberg (1988) and Bynum (1987) state how our contemporaries reported that there is historical evidence of how religion promoted self-starvation as a way of cleansing the spirit (Sobal 1991).

Today it is fashionable to regulate women's bodies through dieting practices, but it is no longer about religion or spirituality but rather is about sexuality. Women strive to conform to cultural demands regarding attractiveness and continue to be affected by the criticism received from industrial countries that continue to report how overweight women are considered to have no self-control (Sobal 1991).

Since the 1980 media information has become more explicit (Bogaert, Turkovich and Hafer 1993). Their argument is that the sexually explicit material in the media portrays female sexuality as degrading. In addition, they said the new changes promoting beauty do not include faces only nude bodies (Bogaert, Turkovich and Hafer 1993). "it is not surprising that females may also feel pressure from the media to look and act youthful" (Bogaert, Turkovich and Hafer 1993, 138). They believe that in present time, the levels of objectification continue to exist. Women continue to work hard to fit the beauty requirements of the times (Bogaert, Turkovich and Hafer 1993).

## Physiological Effects of Being Overweight

### The Effect of Being Overweight on General Health Conditions

*“Sudden death is more common in those who are naturally fat than in the lean”  
Hippocrates (4<sup>th</sup> Century B.C.).*

Today, because of scientific advances, Hippocrates’ statement is continually under revision. One important discovery regarding overweight women’s health is the fact that many women are actually suffering from various illnesses and still managing to look radiant and healthy (Keigher and Taylor-Brown 2001). People who know of a woman’s declining health status may find it amazing how well the ill woman copes with her illness. The majority of women who are sick, but appear healthy, are wealthy, with a broad social network and a way of life that maintains this image (Keigher and Taylor-Brown 2001). These women have many friends, neighbors and relatives. They can be happy living with two or three illnesses (Keigher and Taylor-Brown 2001). Part of Hooyman and Gonyea (1995) statement regarding this conduct in women, reflects how our society controls women’s manifestations regarding their health. How women hide and cover their illnesses and how they assume the healthy role mandated by society. It is normal for women to cover the truth and to present to others an impeccable physical image of radiance and attractiveness (Keigher and Taylor-Brown 2001, 67).

When covering the truth, when pretending that everything is alright, women faced the challenge of what it means to wake up to the reasons and find solutions to prevent the many health risks of being overweight. Being an epidemic in the United States, overweight women and obese women should become concern about their health and what it is to be obese? In discussing the issues of weight and obesity, researchers Clement and Ferre (2003) report:

The etiology of obesity is multifactorial. Poor diet and physical inactivity cause overweight and obesity. This imbalance between food intake and energy expenditure is determined, in large part, by the socioeconomic context. Although obesity is affected by interaction between multiple genes and the environment, the genetic pool is not changing

rapidly; it is the environmental and social context that has changed and caused the epidemic (Galvez, M., Frieden, T and Landrigan, P.J., 2003, 684).

Experts working with overweight and obese individuals are distressed and do not want to confirm that there is a link between obesity and mortality.

(<http://www.obesityscam.com/myth2.11.htm>.)

Furthermore, the Harvard Health Policy Review (2003) states that “the major problem with this ‘obesity kills’ statistic is the lack of compelling evidence to substantiate it.”

(<http://www.obesityscam.com/myth2.11.htm>).

In 2004, the Department of Health and Human Services, National Institutes of Health (NIH), and Centers for Disease Control and Prevention (CDC) announced in a press conference that according to a study from the Centers for Disease Control and Prevention, each year 400,000 obese individuals die due to poor diet and physical inactivity. USA Today consequently published an article titled, “Obesity on Track as No. 1 Killer”.

(<http://www.obesityscam.com/myth2.11.htm>).

“Obesity is widely recognized as a health risk. The negative effects of obesity and other known health risks, such as smoking, heavy drinking, and poverty, have been well documented” (Sturm and Wells 2002, 1). RAND researchers, health economist Roland Sturm and psychiatrist Kenneth Wells, examined the comparative effects of obesity, smoking, heavy drinking, and poverty on chronic health conditions and health expenditures. Their finding: “Obesity is the most serious problem. It is linked to a big increase in chronic health conditions and significantly higher health expenditures. And it affects more people than smoking, drinking, or poverty” (Sturm and Wells 2002, 1).

Pennsylvania Health Care reported that it is a fact that obesity related illnesses can cause the death of many individuals (www.phc4.org). In fact, according to Finkelstein, Fiebelkorn and Wang an overweight individual, over time, will develop many health problems. Being 40 percent overweight offers a great risk of dying prematurely from one of the many illnesses associated with obesity <http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.219v1/DC1>.

These medical conditions include diabetes, heart disease, high blood cholesterol, high blood pressure, and stroke. It is also associated with higher rates of certain types of cancer. Obese women are more likely than non-obese women to die from cancer of the gallbladder, breast, uterus, cervix and ovaries (<http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.219v1/DC1>).

The State of Washington reported an increase in obesity in the decade between 1990 and 2000, using The Behavioral Risk Factor Surveillance System (BRFSS). This information reflects a large increase, from 9.4% in 1990 to 18.8% in 2000. In addition, nationwide there was a comparative increase in obesity, from 12% in 1990 to 20% in 2000 (Washington State Department of Health 2002).

### **Health Risks for the Overweight/Obese**

Increased body weight is associated with increased death rates for all cancers, and for cancers at multiple sites (Calle, Rodriguez, Walker-Thurmond and Thun 2003).

In Florida, the American Cancer Society reported statistics on cancer for the year 2004. Reported deaths for female breast cancer were 13,350, and for colon and rectum cancer, 9,950. (Cancer Facts and Figures 2004,5) found in

[http://www.cancer.org/downloads/STT/CAFF\\_finalPWSecured.pdf](http://www.cancer.org/downloads/STT/CAFF_finalPWSecured.pdf)

The primary risk factor for colon and rectum cancer is linked to obesity in individuals over the age of 50. These individuals have a personal or family history of colorectal cancer or polyps or inflammatory bowel disease. Their obesity is linked with poor physical activity and a high fat diet that includes red meat and no fruits or vegetables. Other risk factors include smoking and excessive consumption of alcohol.

([http://www.cancer.org/downloads/STT/CAFF\\_finalPWSecured.pdf](http://www.cancer.org/downloads/STT/CAFF_finalPWSecured.pdf))

“A recent study has also suggested that men and women who are overweight are more likely to die from colorectal cancer”. (American Cancer Society 2004, 11).

Dr. Carmen Rodriguez, MD, MPH Senior Epidemiologist at the American Cancer Society reports that "Obese women double their risk of breast cancer".

([http://www.medihealthdme.com/education/diabetes\\_femalesex.htm](http://www.medihealthdme.com/education/diabetes_femalesex.htm))

Cardiac problems are also a concern for people who are overweight. “In the obese, it takes more energy to breathe because of the weight of fat on the chest” (Weck 1986, 17). The heart needs to work harder in order to pump the blood throughout the body and into the lungs. In medical investigations a correlation has been found regarding the abnormal size of the heart and an individual being overweight. (Weck 1986).

“The overweight individual develops high blood pressure, high cholesterol, and narrowed blood vessels blocking vital organs including the heart, brain or kidney” (Weck 1986, 17).

Overweight and obese women have a higher risk of developing certain health problems, or complications. These risks are particularly high for people who smoke or who are not physically active (Weck 1986).

Serious illnesses such as diabetes also arise as a result of being overweight. (Weck 1986). The process of becoming diabetic is directly related to the excess intake of food. The food

affects the blood sugar levels that are regulated by the hormone insulin. Insulin is produced in the pancreas. Excess amounts of sugar in the blood are stored in the liver and other organs. (Weck 1986). When this takes place, insulin helps transform sugar into fat cells. These fat cells are called triglycerides. When these fat cells become full, they cannot accept any more fat. At that point the pancreas needs to produce more insulin and it becomes enlarged. The pancreas becomes bigger as obesity continues, and the body becomes less and less sensitive to insulin (Weck 1986).

Onset of Type 2 diabetes during pregnancy occurs much more frequently in obese women. One such review indicated at least a quadrupled increase in risk (Hudson, T. 2002).

The National Institute of Diabetes & Digestive & Kidney Diseases (2002) reported “Diabetic Neuropathy will lead to numbness and sometimes pain and weakness in the hands, arms, feet, and legs. Problems may also occur in every organ system, including the digestive tract, heart, and sex organs” This is relevant information that shows another health concern for overweight women. The way in which overweight women’s sexuality is affected by a physical illness such as diabetes.

[http://www.findarticles.com/p/articles/mi\\_m0652/is\\_2002\\_May/ai\\_108276230](http://www.findarticles.com/p/articles/mi_m0652/is_2002_May/ai_108276230).

Weck in 1986 reported, “In women, fat tissue is involved in the production of the female sex hormone, estrogen. Apparently, an excess of fat leads to the production of too much estrogen and too little of another sex hormone, progesterone. The imbalance between these two vital sex hormones tends to disrupt the normal menstrual cycle, preventing the release of an egg from the ovaries. The result is female sterility” (Weck 1986, 17).

Wang, Davies and Norman (2002) assert that being overweight or obese is a significant risk factor for spontaneous abortion. The overall incidence of spontaneous abortion in the

general population was reported at 20%. “Of all known risk factors for failed pregnancies, obesity may have great significance because it is potentially modifiable and may be able to be self-managed to some extent by inflicted women” (Wang, Davies and Norman 2002, 554).

Anovulation and infertility are also associated with an increased Body Mass Index (BMI). A BMI of 28 to 29.9 was associated with a 2.4 higher risk of infertility compared with a BMI of 20 to 21.9 (Hudson, T. 2002).

Elmore, MD, MPH, of the University of Washington in Seattle, and colleagues, analyzed more than 100,000 mammograms taken at their medical facility from nearly 70,000 women. They reported their findings in the May 24 issue of *Archives of Internal Medicine*. They compared the mammograms of underweight, normal weight, overweight and obese women. They discovered that the number of obese women that were contacted to visit their facility for additional testing far outnumbered the women of the other weight groups. "Obese women had more than a 20% increased risk of having a false positive mammogram result." (Elmore 2004, 1140 found in. <http://onhealth.webmd.com>.)

The American Obesity Association found that overweight women are at higher risks for infertility. Conditions, such as cardio-vascular disorders and diabetes, become consequential complications that create increased difficulties for overweight and obese women to become pregnant ([www.obesity.org/subs/fastfacts/Health\\_Effects.shtml](http://www.obesity.org/subs/fastfacts/Health_Effects.shtml))

The National Kidney Foundation (2006) found, “More than 60% of Americans aged 20 and older are overweight”... Being overweight increases the risks for kidney disease because there is a greater chance of developing diabetes or high blood pressure which are the leading



causes for kidney failure” (National Kidney Foundation 2006, 2)

([www.kidney.org/atoz/atozItem.cfm?id=131](http://www.kidney.org/atoz/atozItem.cfm?id=131)).

Kidney disease is one of the conditions affecting overweight and obese individuals. Kidney disease can affect a person’s sexual function. The National Kidney Foundation explains that “The chemical changes that occur in your body with kidney disease affect sexual interest and/or sexual ability. Physical changes may cause people with kidney disease to feel less attractive sexually. Many of the medicines used to treat high blood pressure may affect sexual functioning.” (<http://www.kidney.org/atoz/atozItem.cfm?id=108>.)

The National Kidney Foundation also affirms that when the patient with a kidney condition needs to take steroids, they gain additional weight, may suffer from acne, and experience unwanted hair growth or hair loss. All these factors impact an individual’s self image and overall sexual satisfaction (<http://www.kidney.org/atoz/atozItem.cfm?id=108>).

In the study conducted by Gustafson, Lissner, Bengtsson, Björkelund and Skoog:

in which a group of 290 women who were born between 1908 and 1922 participated and had four follow-up exams between 1968 and 1992 it was found that women in the age group of 70 to 84, had a computed tomography (CT) scan to measure for any brain atrophy. These researchers compared the results of the CT scan to the women's body mass index (BMI, a measure of weight in relation to height) and found that being overweight or obese increased the risk of brain loss in the region of the brain known as the temporal lobe, which plays an important role in language, memory, and hearing. The results of the study showed that age and BMI were the only significant predictors of temporal atrophy. Risk of temporal atrophy increased 13 to 16% per 1.0-kg/m<sup>2</sup> increase in BMI ( $p < 0.05$ ). There were no associations between BMI and atrophy measured at three other brain locations. The research conclusion was that overweight and obesity throughout adult life may contribute to the development of temporal atrophy in women (Gustafson, D., Lissner, L., Bengtsson, D., Björkelund, C. and Skoog, I. 2004, 1876) “Obesity affects every part of the body –no part escapes damage” (Haslam 2004, 1).

The above mentioned study brings to awareness how being overweight represents a high risk for developing Alzheimer’s disease, stroke and heart disease. Loss of brain tissue contributes

to the development of vascular health conditions and the early onset of dementia (Gustafson 2004) <http://news.bbc.co.uk/go/pr/fr/-/2/hi/health/4023575.stm>.

In research conducted by the Department of Health and Human Services they report “They (referring to women) are at greater risk for Alzheimer’s disease than men are, and twice as likely as men to be affected by a major depression” (Keigher and Taylor-Brown 2001,67). As is mentioned above, this is compounded for overweight women.

Research from as early as the 1930s, demonstrated a link between excess body weight and polycystic ovary syndrome (PCOS). Excess body weight can lead to menstrual cycle irregularity, infertility, an increased risk of miscarriage and difficulty achieving a good response to assisted reproductive procedures. <http://www.pregnancymd.org/weight-and-infertility.htm>

Some of the most common health concerns in overweight women are: hypertension, elevated blood pressure, cholesterol, diabetes, heart disease, gall bladder disease, liver disease, sleep apnea and respiratory problems (The Washington State Department of Health 2002, 1 found in [http://www.doh.wa.gov/HWS/doc/RPF/RPF\\_Obs.doc](http://www.doh.wa.gov/HWS/doc/RPF/RPF_Obs.doc)).

In addition, The American Obesity Association emphasized “There are other illnesses associated with being overweight or obese“. 75% of hypertension cases are reported to be directly attributed to obesity. ([www.Obesity.org/subs/fastfacts/Health\\_Effects.shtml](http://www.Obesity.org/subs/fastfacts/Health_Effects.shtml)).

Obesity has been associated with the development of Osteoarthritis (OA) of the hand, hip, back and especially the knee. Birth defects have been found as a result of maternal obesity, as measured by a BMI greater than 29. There have been marked incidences of neural tube defects in several studies, although variable results have been found in this area. Breast cancer and cancers of the esophagus and gastric cardia, endometrial cancer, gallbladder disease, gout and hypertension are some of the most common diseases that are strongly associated with obesity.

This is especially noteworthy in cancer of the esophagus, where the risk of getting it becomes higher with increasing BMI. ([http://www.obesity.org/subs/fastfacts/Health\\_Effects.shtml](http://www.obesity.org/subs/fastfacts/Health_Effects.shtml)).

The Obesity Organization also reported that an impaired immune response, impaired respiratory function, infections following wounds, liver disease, obstetric and gynecologic complications, pain, pancreatitis, sleep apnea, stroke, surgical complications, urinary stress and incontinence are present dangers for overweight and obese women” ([http://www.obesity.org/subs/fastfacts/Health\\_Effects.shtml](http://www.obesity.org/subs/fastfacts/Health_Effects.shtml)).

As the literature review reflects, increases in weight gain are associated with an increasingly poor quality of life and high mortality rate. As the percentage of weight increases, mortality increases. Women who have the lowest mortality rate in the U.S.A. are women who weigh at least 15% less than the average weight for women of their age group. (Hudson, T. 2002).

Both men and women, who are 20% overweight, have an eight-fold increase in the incidence of hypertension than those men and women who are within a normal weight range. The risks are greater for hypertension and dyslipidemia, as well as cardiac morbidity and mortality (Hudson, T. 2002). Hyperlipidemia occurs 1.5 times more frequently in overweight people than in lean people (Hudson, T. 2002). “The association of obesity with insulin resistance and hyperinsulinemia is increasingly understood as both cause and effect. Insulin resistance and hyperinsulinemia leads to the development of type 2 diabetes (Hudson, T. 2002). “Overweight and obesity are associated with significant health consequences from other causes as well. Several cancers are associated with obesity -- gallbladder, breast, cervix, uterus and ovaries. The risk of gallbladder disease increases with weight, to the point that 28% to 45% of morbidly obese individuals have gallbladder disease” (Hudson, T. 2002).

A study conducted by Patterson, Frank , White and Kristal state that carrying extra weight was tied to 37 of the 41 health conditions studied in women, and 29 of 41 conditions in men. In addition to diabetes, knee replacement and high blood pressure, highly obese women are also more likely to experience heart failure, gall bladder removal, pulmonary embolism, chronic fatigue and insomnia. ([www.fhcrc.org/about/pubs/center\\_news/2004/dec16/sart3.html](http://www.fhcrc.org/about/pubs/center_news/2004/dec16/sart3.html)).

Ogden, Flegal, Carroll and Johnson (2002) state, “how consistently the reports show that in the United States a new epidemic, obesity, its happening. Children and adults alike are increasing in girth at rapid rates” (Galvez, M., Frieden, T and Landrigan , 2003, 684).The reports also show how minorities are disproportionately affected:

Studies on obesity consistently report a higher prevalence of obesity in African Americans and Mexican Americans compared with the white, non-Hispanic population. In the National Health and Nutrition Examination Survey (NHANES) 1999-2000, 23.6% of non-Hispanic blacks and 23.4% of Mexican American adolescents were overweight, a startling near-doubling increase (from 13.4% and 13.8%, respectively) in the past decade (Ogden et al. 2002). This contrasts markedly with the prevalence of overweight in non-Hispanic whites of 12.7%( Galvez, M., Frieden, T. and Landrigan , 2003, 684).

When analyzing the consequences of having diabetes, and the impact such would have on female sexuality, several researchers drew the following conclusions:

“In a 1971 study of 225 hospitalized patients, a complete absence of orgasm was noted by 35% of women with diabetes while only 6% of non-diabetic women had a similar complaint. In 1977, when Ellenberg studied 100 women with diabetes, there did not appear to be any effect of neuropathy on orgasmic function. Approximately 18% of women with diabetes noted decreased or absent orgasm or libido. In 1981, Jensen noted that there was no difference in sexual function in women (Age range 26- 45 years) treated with insulin compared to 40 non-diabetic women. This was confirmed by a later study by Tyrer in 1983. Schreiner-Engel in 1985 found women with diabetes to have less satisfaction with relationships and more deficient global level of psychosocial functioning. She later found that those with type 1 diabetes were no different from non-diabetic women but type 2 diabetes had a negative impact on sexual function. ([http://www.medihealthdme.com/education/diabetes\\_femalesex.htm](http://www.medihealthdme.com/education/diabetes_femalesex.htm)).

Among the many reasons for understanding the situation that overweight women cope with, health is the most important. How being overweight affects women's health and the many factors to consider regarding overweight factors. The National Kidney Foundation informs "Kidney disease can cause physical and emotional changes that may affect your sex life. The chemical changes that occur in your body with kidney disease affect hormones, circulation, nerve function and energy level".

The hormonal connection will be investigated to further understand the connection between the overweight female body and the hormonal balance elemental for a healthy sexuality.

## **Influence of body fat in the hormonal reaction**

*“Understanding the impact of hormones on sex differences in the brain is important for understanding human health and disease” Jill Becker, University of Michigan.*

According to Lovejoy, J.C. (1998) “Because of the fluctuations in reproductive hormone concentrations, it is more frequent that women become obese. For women pregnancy and menopause are the times in which there is a retention of weight gain, for example during menopause the average woman gains from 2 to 5 pounds” (1). “There is also a hormonally driven shifting body fat distribution from peripheral to abdominal at menopause, which may increase health risks as well” and added “In summary, hormonal fluctuations across the female life span may explain the increase risk for obesity in women” (Lovejoy, JC 1998, 1). The importance of hormones becomes more present when there is a decline in testosterone production which affects in a negative way all three phases of the sexual response: desire, arousal and orgasm (Robinson, H. 2004).

Crenshaw (1996) calls the hormones “the love brigade and the members of the battalion, the hormones that are substances that flow through our arteries and veins, wash over our brains, all the while manipulating our romantic sexual emotions. Important and necessary hormones such as Dehydroepiandrosterone (DHEA)” (Crenshaw 1996, 3).

Testosterone is the male hormone. “Testosterone is better represented by the Marlon Brandon type, sexual, sensual, alluring, dark, with a dangerous undertone” (Crenshaw 1996, 5). “Testosterone plays an important role stimulating desire, as it enhances the neurotransmitter dopamine, responsible for the sex drive” (Crenshaw 1996, 5).

Testosterone’s dark side is represented by the aggressive, competitive and violent behaviors. Animals are able to establish their territory, they take control of their companions,

fight and protect themselves from intruders. (Crenshaw 1996). “Testosterone is also an aphrodisiac found in both sexes promoting a drive for genital sex and orgasm” (Crenshaw 1996, 5).

Testosterone also works as an antidepressant that has the power to make individuals become angry and irritable (Crenshaw 1996).

According to Crenshaw it is important to learn more about Serotonin. This hormone influences sexually aggressive behaviors depending on the levels. High levels of Serotonin decrease desire for sex while a low level of Serotonin intensifies the sexual desire. Serotonin is a neurotransmitter and it helps transmit signals in the brain from one nerve ending to another (Crenshaw 1996).

Prolactic, the gentle hormone. This is the hormone associated with mothering, it increases with pregnancy and nursing and responsible for diminishing sex drive in females. It is known that when men develop abnormal levels of this hormone there is a decrease in sexual desire and potency. (Crenshaw 1996).

Crenshaw (1996) explains:

In February of 1995 in the prestigious Journal of the American Medical Association, a seemingly exhaustive study was reported titled “National Assessment of Physicians’ Breast-feeding Knowledge, Attitudes, Training, and Experience.” There was not one question or comment regarding sex drive. An Australian study concluded that sex drive rebounded after stopping nursing, but didn’t make the connection with prolactin – a correlation that is most well established in other medical conditions. (Crenshaw 1996, 8).

Prolactin secretion is increased in both, men and women, with psychological stress and this explains the connections between a decrease sex drive and stress affecting individuals (Crenshaw 1996). How are hormones divided?

Hormones are divided in two types, the one known as steroids and peptides. In general, steroids are sex hormones related to sexual maturation and fertility. Steroids are made from cholesterol either by the placenta when we're in the womb, or by our adrenal gland

or gonads (testes or ovaries) after birth. Cortisol, an example of a steroid hormone, breaks down damaged tissue so it can be replaced. Steroids determine physical development from puberty on to old age, as well as fertility cycles. If we are not synthesizing the correct steroidal hormones, we can sometimes supplement them pharmaceutically as with estrogen and progesterone. Hormones carry messages from glands to cells to maintain chemical levels in the bloodstream that achieve homeostasis. This reflects how the presence of hormones acts as a catalyst for other chemical changes at the cellular level <http://www.wisegeek.com/what-are-hormones.htm>.

The importance of hormones in human sexuality has been discussed and researched extensively. “Sexual desire, or libido, experienced as a psychological urge, and is centered in the hypothalamus and surrounding limbic structures. In both men and women, the hormone testosterone appears to play a key role in stimulating libido. Sexual response is also promoted by dopaminergic function and modulated by prolactin, serotonin, norepinephrine, and nitric oxide levels” (Agronin, Maletta, 2006, 2).

In understanding the possible decrease of sex drive in the overweight female, Sex Hormone-Binding Globulin (SHBG) plays an active role. (SHBG) is a glycoprotein that binds to sex hormones, specifically testosterone and estradiol. Other steroid hormones such as progesterone, cortisol, and other corticosteroids are bound by transcortin. These sex hormones circulate in the bloodstream, bound mostly to SHBG and to some degree a fraction is unbound or ‘free’ and thus biologically active and able to enter a cell and active the function to these hormones. The bioavailability of the sex hormones is directly influenced by the levels of fat to which SHBG will bind. ([www.wikipedia.org/wiki/Sex\\_hormone\\_binding\\_globulin](http://www.wikipedia.org/wiki/Sex_hormone_binding_globulin)).

The overweight women’s sexuality can be directly affected by SHBG. One way to look at female sexual drive is by learning about the hormone libido receptors in the brain, which has been evaluated in patients on birth control pills, in whom sexual activity paradoxically decreases (DeCherney AH. 2000). (SHBG) levels are increased, and, therefore, free testosterone levels seem to be affected by the use of birth control pills. In addition, the progestins in the pill are 19-



nortestosterone derivatives, which may have some androgenic effect in their own right (DeCherney 2000).

Women on estrogen replacement therapy, with the addition of testosterone seem to report increased libido, and there is subjective information that there is an increase in psychological sense of well-being (DeCherney 2000).

In the past, researchers were more interested in reviewing the relationship regarding androgens and sexual desire with one answer testosterone, the most potent androgen. The "free" or "unbound" or "bioavailable" testosterone, can be more or less found in the system depending on Body Mass, the higher the BMI the lower the levels of 'free' testosterone (Regan 1999, 2).

Testosterone is elemental for the sexual drive in both males and females and according to researchers (Dunn, Nisula, & Rodbard, 1981; Umstot, Baxter, & Andersen, 1985) "Free testosterone, then, is the hormonal component most useful for assessing androgenic influences on or correlates of sexual response. However, because the portion of testosterone bound to albumin can dissociate to free, active testosterone is often difficult for researchers to obtain reliable measurements of free testosterone" (Regan 1999, 1).

"In the female, we find the relevance of hormones, particularly testosterone, to sexuality less clear at each of the three phases of the life course" (Bancroft 2002, 1).

There is evidence regarding the effects of testosterone in women's sex drive as it has been studied with women given testosterone after surgical removal of their ovaries. According to Sherwin and Gelfand (1987) "In such cases testosterone will be much lower than in women with normal menopause, whose postmenopausal ovaries continue to produce significant amount of testosterone (Bancroft 2002, 1).

From a medical anthropological perspective, "the hormone levels have changed over the course of evolution in humans with dramatic effects on health" (Batchelder 2002,1).

Research studies conducted by Harvard anthropologist informs how physical labor in our culture and the evolution in the environment lowers the chance that a women can become pregnant and that there is a lot of energy interfering with the production of hormones (Batchelder 2002). It is precisely the energy expenditure that creates greater risks for women to develop breast, uterine and ovarian cancer. (Batchelder 2002).

Of significant importance is the fact that evolution has influenced hormone level with what is called Neoteny. In simple words, this means that humans have a tendency to prefer younger appearing mates. “This younger mates have a decreased testosterone dependent characteristics which is manifested with a lower aggressive response, reduced anxiety and a more permitting attitude towards courtship” (Batchelder 2002, 2).

These are the important elements assisting human nature and sexual behavior. Some of the hormones hereby discussed can part of the intrigue and fascination with sexuality. According to Crenshaw (1996) “While each of these substances has its own distinct personality, the magic occurs when they interact with each other, crating the cycles and peaks that alternately distract and engage us” (Crenshaw 1996, 9).

The answer to why there are so many women uninterested in sex can be found in both physical and psychological states. Physical reasons will be a deficiency of testosterone. Hotze argues that many overweight women in this country experience estrogen dominance consequently suffering from a deficiency of progesterone and testosterone.(Hotze 2005).

“When a woman is estrogen dominant, she experiences numerous anovulatory cycles in which there is no elevation in testosterone at this midpoint. This problem is compounded by the fact that estrogen dominance increase the liver’s production of sex hormone binding globulin inhibiting testosterone from entering into cells” (Hotze 2005, 121). In addition, the overweight

female suffers more frequently from estrogen dominance condition than the lower BMI female. (Hotze 2005).

“Obesity can also be caused by a hormonal imbalance, as in hypothyroidism or Cushing’s disease, but this is rare. Our understanding of obesity is growing rapidly. For example, we now know that fat cells produce many hormones that play an important role in how much you eat, how much energy you spend and how much you will weight” (www.hormones.org).

Being overweight as a result of suffering from hypothyroidism affects women seven times more frequently than men. “The higher incidence of genetically inherited autoimmune thyroiditis among women is one reason why. The effect of female hormonal imbalance is another” (Hotze 2005, 70).

“Again, we visit the issue that only .05 percent (five parts in ten thousand) of thyroid hormone circulating in the bloodstream remains unbound and available to the cells. When a woman has estrogen dominance, the situation is even worse” (Hotze 2005, 71). In addition research shows that “A deficiency of thyroid hormones can affect levels of sex hormones, causing menstrual abnormalities in women and a loss of libido. Hypothyroidism can also impair fertility and, if it is present during pregnancy, can cause miscarriage, premature delivery or stillbirth” (Hotze 2005, 72)

## **Psychological Effects of overweight**

### **Impact on Self Image and Self Esteem**

Body image - the individual, subjective sense of the body - is theorized to be a core component of personality (Freud, 1927).

Fisher (1990) argues “body image is assumed to be a matter of conscious as well as unconscious apprehension, is thought to reflect the combined impact of actual body structure and function, early and continuing body-related experience, lifelong social response to body appearance, and sociocultural values and ideals regarding the body” (Koff and Rierdan 1997, 615). Furthermore “Body image, thus, is a biopsychosocial construction, partially determined by, but not reducible to, the objective physical body” (Koff and Rierdan 1997, 615).

Koff and Riedan clearly emphasize that body image is a biopsychosocial Construction and that women are programmed from early age to assimilate their body image. Koff and Rierdan’s theory reinforces the characteristics and expectations associated with a poor body image. It is detrimental to self esteem and the formation of feelings regarding the self. Women’s self-esteem has been influenced with a variety of messages in the media on how to comply with their appearance (Koff and Rierdan 1997). This programming influenced the way women need to be accepted by society with what media considers to be beautiful and attractive (Forssman-Falck, Kilmartin, Kliewer, Myers and Polce-Lynch 1998).

In the United States individuals are excessively preoccupied with physical appearance; there are messages about the right image throughout the media. According to research, this is why adolescents struggle to find their physical identity by taking control of their body image (Forssman-Falck, Kilmartin, Kliewer, Myers and Polce-Lynch 1998). Furthermore, the existing research demonstrates how the underlying thoughts and feelings about body image are

constructed during the adolescent years (Forssman-Falck, Kilmartin, Kliewer, Myers and Polce-Lynch 1998).

“Adolescents females were reporting a positive as well as negative influence on their body image compared to the boys. Their findings brought to the surface more concerns regarding how men and women are affected by cultural norms of physical attractiveness, and while men may dislike their physical features, their judgments about these attitudes seldom affect overall self-esteem the way that affects women” (Forssman-Falck, Kilmartin, Kliewer, Myers and Polce-Lynch 1998, 1025).

The importance of self-esteem continues to be of interest for additional research. Abell and Richards (1996); Harter (1989); Polce-Lynch et al. (1994); Polce-Lynch et al. (1998) “Body image, or physical appearance, has been identified as a significant predictor of adolescent self-esteem in previous quantitative research” (Forssman-Falck, Kilmartin, Kliewer, Myers and Polce-Lynch 1998, 1025 ). Mead (1934) believed that self-esteem represents" a constant demand to realize one's self in some sort of superiority over those about us" (Suls 1993).

Regarding self-esteem even those individuals with tendency to evaluate themselves as superior to others can be affected by the judgment of others. Their self-worth can be affected by motivational forces of negative evaluations (Suls 1993). The issues of self-esteem become more evident with the situation that “If the tendency on the part of High Self Esteem people to see themselves as better than others is driven by a desire to enhance feelings of personal worth, it ought to be most apparent after feelings of self-worth have recently been threatened” (Suls 1993, 41).

## **Sexual Response Cycle**

“Freud argued that clitoral orgasm was an adolescent phenomenon, and upon reaching puberty the proper response of mature women changed to vaginal orgasms” (Freud 1938).

Freud’s theory of female sexuality changed after extensive research conducted by Kinsey, Masters and Johnson, Singer Kaplan and others. Alfred Kinsey, for instance became interested in finding out more about human sexuality and started to conduct studies in the late 1940s and early 1950s. Heralded as the first "scientific" look at sex, Kinsey’s research became the foundation of the sexual revolution that has rocked not only America but the world. His research created opportunities for more investigations. Kinsey and co-workers obtained enough statistical information that reflected the patterns of sexual behavior during the years of 1938 to 1952 ([www.cwfa.org/kinsey.asp](http://www.cwfa.org/kinsey.asp)).

Kinsey was able to explain the fundamentals of sexual behavior but two questions were still pending. These two questions would provide important answers in the study of sexology, what physical reactions develop as the human male and female respond to effective sexual stimulation? And second why do men and women behave as they do when responding to effective sexual stimulation? Masters and Johnson utilized these questions as the base for their research. (Masters and Johnson 1966).

In 1954 the Department of Obstetrics and Gynecology of Washington University School of Medicine began their investigation regarding sexuality. Soon after, in 1959 the Human Sexual Inadequacy institute was founded. (Masters and Johnson 1966).

Masters and Johnson began their research by recruiting a population of adult men and women who were willing to serve as subjects in the reproductive biology laboratory. (Masters and Johnson 1966). They selected socially isolated individuals who cooperated and were available for the study. For the first twenty months of the program a total of 118 females and 27

male prostitutes contributed their sociosexual occupational and medical histories to the investigation. (Masters and Johnson 1966).

The Sexual Response Cycle became significantly important in the field of sexology. For example, in Masters and Johnson's original research of the human sexual response cycle, orgasm is the third of four stages, occurring after the plateau phase and before the resolution phase.

Another widely accepted model of the sexual response cycle, developed by Helen Singer Kaplan, M.D., PhD., this theory involves just three stages: desire, excitement and orgasm ([www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm](http://www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm)).

Sexual Response means that there are processes taking place in the human body regarding sexuality and individuals have no control over these reactions. These processes are important to understand as well as what takes place in the human body; when the heart rate increases, and when skin becomes red, pupils dilate and a heightened awareness are present. These are some of the important responses individuals experience during a sexual encounter. Why it has become so important to give a definition and a name to these reactions? It is because Scientist, Physicians and Therapists need to make sense of the way the body reacts sexually. ([www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm](http://www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm)).

It was 30 years ago that Masters and Johnson described the process of increasing arousal to the climax for both men and women. This was an original theory by Masters and Johnson in 1966, the sexual response cycle. It was defined as the process to increase in men and women arousal to climax with the following four phases: Excitement phase, Plateau phase, Orgasm phase, Resolution phase ([www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm](http://www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm)).

However, Kaplan, a prominent sex therapist and author working around the same time as Masters and Johnson, proposed a slightly different model of sexual response, only three stages: Desire, Excitement and Orgasm. “Her proposal grew not out of physiological research in a laboratory, but out of her clinical experience as a sex therapist”.

([www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm](http://www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm)).

Kaplan understood that the research conducted by Masters and Johnson had limitations as they utilized individuals that were willing to be observed and monitored while having sex in a laboratory, these individuals were in its majority prostitutes, the results may differ in many ways from the general public. It is also important to understand that while sexual response may be observed in the body, this experience is also at a cognitive and psychological level as well. This subjective experience of sexual response should be included in the descriptions. Masters and Johnson did not take this into account in their presentation and findings.

([www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm](http://www.sexuality.about.com/od/anatomyresponse/a/sexualresponse.htm)).

Kaplan’s Desire Phase is the initial force moving human sexuality. Sexual Desire is the drive, the force behind sexual impulses which is activated by the neural system in the brain, this is produced by the reflex vasodilatation of the genital blood vessels (Kaplan 1979).

### **Desire Phase**

During the desire phase and once the neural system is active the person becomes “horny”. Singer Kaplan states “The individual may feel vaguely sexy, interested in sex, open to sex, or even just restless. These sensations cease after sexual gratification, i.e., orgasm. When this system is inactive or under the influence of inhibitory forces, a person has no interest in erotic matters; he ‘loses his appetite’ for sex and becomes ‘asexual’” (Kaplan 1979,10).



Kaplan (1979) explains that “the neural activity of the sex circuits are translated into the experience of sexual desire which is not clearly understood. Nevertheless, it is understood that because of the electric activity in the neurons ‘a light’ comes up sending the signal to the individual’s chemical network which starts the process of desire”(10). The sexual system is connected with other parts of the brain and can be inferred from behavior, in addition, Kaplan (1979) introduces:

It is highly probable that the sexual centers have significant connections, neural and/or chemical, with the pleasure and the pain centers of the brain. When we have sex, the pleasure centers are stimulated and this accounts for the pleasurable quality of erotic behavior. But when we are in pain, we don’t feel like sex because the pain centers inhibit the sexual system. (10).

It is also necessary to analyze the importance that behavioral observations offer regarding the sex circuits that are interconnected with some parts of the brain and that has the capacity to retrieve from memory storage. “There is evidence that sexual desire is highly sensitive to the objects and activities which will and will not evoke our desires”. (Kaplan 1979, 12). “Evidence shows that the sexual desire centers of males and females differ anatomically and even physiologically” (Kaplan 1979, 15). In the United States there are factors that seem to be associated with inhibition of the sexual desire for females. While both males and females may be “turned off” when angry with their partner, this is more true of women. Females loose desire for their partners when they are hostile, upset and angry. The factors affecting desire are biologic and inhibition of desire lies in the neural organization, the balance of hormones and neurotransmitters that make desire the subject that influences sexual pleasure. ( Kaplan 1979, 15).

## **Excitement Phase**

During this phase both men and women start to show signs of sexual excitement when the vasodilatation of the genital blood vessels takes place. Singer Kaplan argues that “During sexual arousal two centers in the spinal cord (Sx, S3 and S4 and one at T11, T12, L1, and L2) become activated and cause the arterioles which invert the genitals to dilate” (Kaplan 1979, 16). “There are anatomic differences in the male and the female genitals once the vasodilatation causes their organs to become swollen. The changes found in both male and female organs are complementary” (Kaplan 1979, 16).

“The female excitement phase shows how female experiences the swelling of the labia and genital tissues surrounding the vaginal barrel” (Kaplan 1979, 17). There are other signs of the female excitement “genital blushing heightened coloring of the labia, and the vaginal wetness or lubrication which is the most important sign of the female excitement” (Kaplan 1979, 17). Kaplan informs that “the female excitement, the lubrication and swelling of the genitalia are produced by the local vasodilatory reflexes, which are governed primarily by the parasympathetic nervous system” (Kaplan 1979,18).

## **Orgasm Phase**

Komisaruk, B.R. (1982) describes orgasm from a psychophysiological perspective “orgasm appears to consist of a highly synchronized combination of somatic, autonomic, and subjective responses, which may nevertheless vary considerably”. Komisaruk (1982) has described orgasm as an “efferent excitation peak... (which) is generated by a process of increasingly synchronous afferent discharge, in which the visceral and somatic systems are ‘entrained by rhythmical stimulation’” in (Byrne 1986, 79). Other authors placed greater emphasis to other areas as the key determinants of orgasm in both males and females (Masters and Johnson 1966).

“Orgasm is the sudden discharge of accumulated sexual tension resulting in rhythmic muscular contractions in the pelvic region that produce intensely pleasurable sensations followed by rapid relaxation. Orgasm is also in part a psychological experience of pleasure and abandon, when the mind is focused solely on the personal experience. It is sometimes called climaxing or coming” ([www.sinclairinstitute.com](http://www.sinclairinstitute.com)).

“Each individual experiences orgasm in a different ways. Depending on the moment, a person can achieve a more explosive, amazing rush of sensations, while others are milder, subtler, and less intense. The differences in intensity of orgasms can be attributed to physical factors, such as fatigue and length of time since last orgasm, as well as to a wide range of psychosocial factors, including mood, relation to partner, activity, expectations, and feelings about the experience”(www.sinclairinstitute.com).

“Orgasms are beneficial for women, physically and psychologically. It helps in reducing pain and discomfort during their menstrual cycle, it helps reduce stress. A sexual relationship should be satisfying for both partners in order to complete them emotionally” ([www.sinclairinstitute.com](http://www.sinclairinstitute.com)).

To reach an orgasm, the central nervous system sends orders to the heart, so that its beat frequency increases. Adrenaline, poured out by the adrenal glands, dilate arteries, increasing blood flow to the muscles involved in sexual activities. To oxygenate blood better, the lungs increase their work, and respiration becomes shallower and quicker. Sweating increases, probably in order to dissipate the accumulated body heat. Orgasm is marked by:

A feeling of sudden intense pleasure, an abrupt increase in pulse rate and blood pressure, The breasts are enlarged, with nipples erected; Sex flush and vasoconstriction are widespread; The clitoris is completely withdrawn; The vagina is lubricated; The uterus is

elevated; spasms of the pelvic muscles causing vaginal contractions in the female. ([www.health.discovery.com/centers-sex-sexpedia-orgasm.shtml](http://www.health.discovery.com/centers-sex-sexpedia-orgasm.shtml)).

Kaplan (1979) explains:

The Orgasmic phase is very similar to the Excitement phase as the genital reflexes are governed by the spinal neural centers. The spinal reflex centers for orgasm are in close anatomic proximity to those of the bladder and anal controls. This is the reason for impairment after injuries of the lower cord affect the orgasm, the urinary and the defecatory controls. Orgasm for both males and females consists of reflex contractions of certain genital muscles. The orgasmic phase has two independent but coordinated reflexes which are the emission and ejaculation sub-phases. For the female, orgasm can be compared to the second phase of the male orgasm. There is no emission phase in the female; however, stimulation of the genitalia will evoke rhythmic contractions occurring at the rate of 8 per second these contractions are pleasurable sensations (20).

For the human female, Masters and Johnson (1966) states:

Orgasm is a psychophysiological experience occurring within, and made meaningful by, a context of psychosocial influence. Physiologically, it is a brief episode of physical release from the vasocongestive and myotonic increment developed in response to sexual stimuli. Psychologically, it is subjective perception of a peak of physical reaction to sexual stimuli. The cycle of sexual response, with orgasm as the ultimate point in progression, generally is believed to develop from a drive of biologic-behavioral origin deeply integrated into the condition of human existence. (127).

In female sexuality eroticism is variable depending on the individuals' culture but it is an important factor in the orgasmic phase. For example, a woman comfortable with her sexuality may utilize erotic fantasies frequently on their own or during a sexual encounter (Masters and Johnson 1966). Usually this is a woman that is not accepted by society despite the nebulous status of the double standard. This double standard regarding female sexuality is frequently the cause for the majority of females to go through psychological trauma regarding their sexuality and their ability to experience an orgasm (Master and Johnson 1966).

## **Resolution Phase**

Masters and Johnson believe that including the Resolution phase was important. Masters and Johnson's describe that "The resolution phase occurs after orgasm and allows the muscles to relax, blood pressure to drop and the body to slow down from its excited state" (Master Johnson 1966, 127). In this phase, the body returns to its original, nonexcited state. Some of the changes occur rapidly, whereas others take more time. The resolution phase begins immediately after orgasm if there is no additional stimulation.

Rather than thinking of the sexual response as having successive stages, Kaplan's model conceptualizes it as having three relatively independent phases or components: sexual desire, vasocongestion of the genitals, and the reflex muscular contractions of the orgasm phase.

[http://www.soc.ucsb.edu/sexinfo/print.php?article=activity&refid=034#res.](http://www.soc.ucsb.edu/sexinfo/print.php?article=activity&refid=034#res)

## Chapter 4: METHODOLOGY / DESIGN

A descriptive research design was utilized for this study. The purpose of this research was to find the physiological and psychological effects of overweight heterosexual women on their orgasmic response. The intention was to uncover some of the existing sexual needs.

A survey questionnaire was the instrument for this research. This questionnaire was given to 20 year old or above participants in the study who identified themselves as overweight by utilizing the Body Mass Index scale. The BMI reflected that participants were 25% or above the normal standards for body weight. Interviews with participants were obtained through snowball sampling technique in Miami Dade County, Florida Area. Fifty two (52) females participated in this research.

The data was collected through interviews with each participant. Upon meeting, the participants agreed and signed the Survey Consent which was also signed by the researcher. This Survey Consent described the purpose of the study, and the participants were ensured confidentiality regarding their identities. The survey questionnaire was administered in English only. For the purpose of this research, The Sexual Experience Questionnaire was adapted to meet the needs of this study.

## **INSTRUMENTATION**

The survey questionnaire was developed in English and administered to English speaking as well as bilingual candidates. The survey questionnaire consists of 21 questions. It outlined the criteria for the participants, explained the purpose of the study, and it assured confidentiality of the participants' identities.

The following demographic information was obtained: Age, place of birth, ethnic group, marital status, educational level, height and body weight as per the Body Mass Index scale. The survey questionnaire posted detailed questions regarding their sexuality, body image, sexual activity, comfort level with sexuality, sexual desire and sexual response regarding orgasm.

## **RECRUITMENT OF SAMPLE**

The sample for this descriptive survey research design was obtained through snowball sampling technique in Miami Dade County, Florida. According to Rubin and Babbie (1997), the term snowball refers to "the process of accumulation as each located subject suggests other subjects" (Mora 2004, 162). This researcher met with various participants and collected information. Those participants were able to assist in recommending potential subjects to participate. Through this process, the researcher was able to interview participants and complete the descriptive survey questionnaire.

## **THE SAMPLE**

The final sample for this study was comprised of fifty two (52) heterosexual overweight women. All participants residing in Miami Dade County, Florida area.

Participants were twenty years of age or older. Their age range from 23 to 56 years old. Participants were in a romantic sexual relationship with a male for a minimum of six (6) months. Countries of origin: 29% Cuban, 29% USA, 13% Colombia, 10% Haitian, 6% Argentina, 6% Peru, 4% Honduras, 2% Spain, 2% Chile. Level of education was from high school graduate to

post graduate education. Their weight ranged from 140 to 250, height range was 4'9 to 5'8, all participants were married or living with a partner.

### **DATA COLLECTION METHOD**

Data to complete this study was obtained from overweight heterosexual women through snowball sampling technique. The researcher interviewed fifty two participants at the researcher's office, 10 participants were interviewed at Florida International University, South campus at the library, a mutually agreed upon location. The researcher was present to answer any questions and to further clarify as needed, as the participants filled out the survey questionnaire.

The first and second sections of the descriptive survey questionnaire were the Survey Consent Form and Demographics respectively. Each of the participants read the form and they were asked to sign in a way that was illegible to assure confidentiality and anonymity. In addition, the Survey Consent Form had the researcher's original signature and telephone number. The approximate amount of time needed to read, sign, and complete the first two sections was fifteen minutes.

During the interview and at the beginning, the researcher noticed most of the participants felt uncomfortable accepting they were overweight and many refused to believe or consider themselves overweight. One participant made a comment "that scale is wrong, that is made for white American women only". They all have questions to the researcher as to why being overweight was important for a sexuality study.

Participants made comments about the questions asked in the questionnaire. "Why is it important to know if I have an orgasm" said one participant or "why do I need to tell if I like to be touched by my husband", this researcher provided ample reasons regarding the importance to obtain the information for these questions. This information will reflect the sexual experiences



for the overweight woman. The participants were given the opportunity to freely express their opinion.

For the completion of the entire non-experimental descriptive survey questionnaire, researcher needed approximately 56 minutes to one hour (56min. to 1½ hrs). The respondents were immensely thanked for their time and willingness to participate. They were encouraged to contact the researcher to find out the final results of the study, if they had further questions, or any need to address, process, or discuss any feelings surfaced due to the interview.

## Chapter 5: RESEARCH FINDINGS AND DISCUSSION

### Survey Questionnaire:

The survey questionnaire was developed in English. It was administered to Anglo-American women and Latin women bilingual and fluent in English. The survey questionnaire was comprised of three (3) sections as follows:

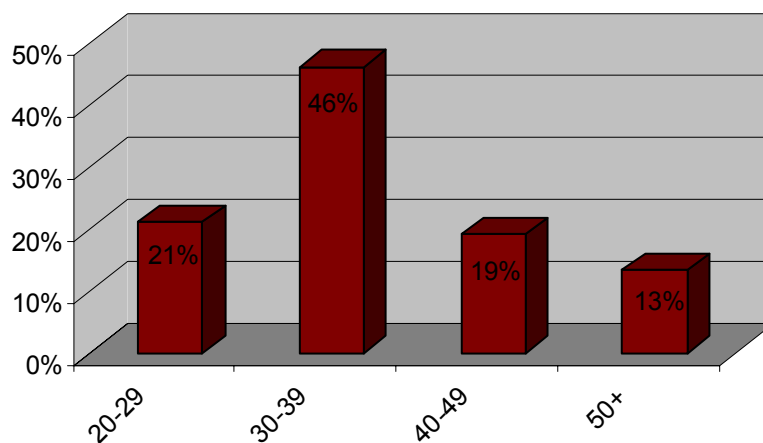
#### Section One:

The first section of the survey questionnaire was a Survey Consent Form. All Fifty two participants (100%) signed the form and met the established criteria.

#### Section Two:

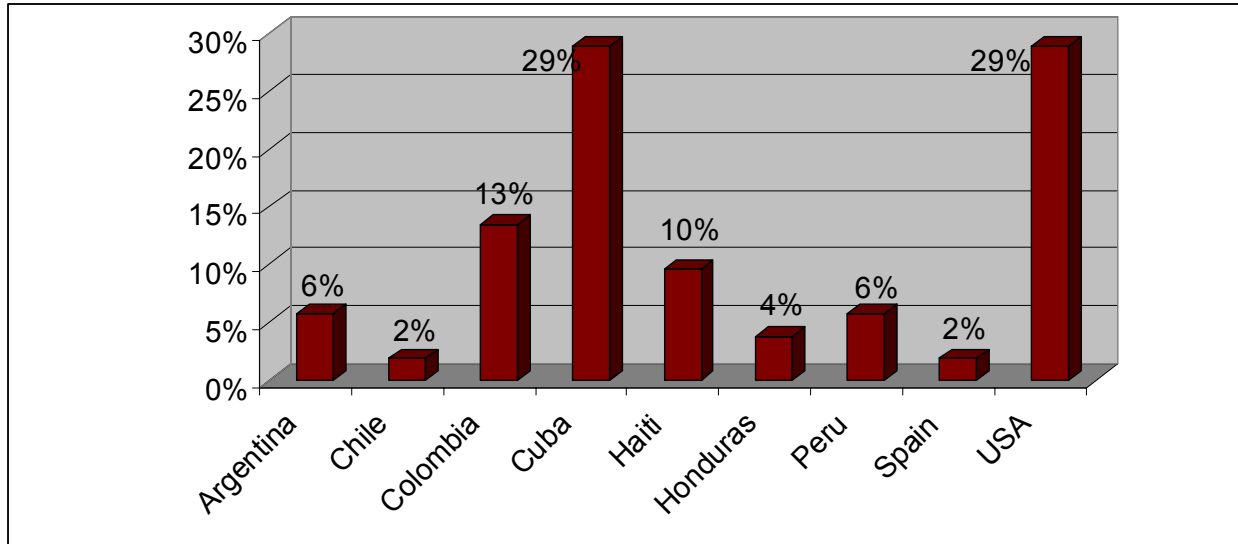
The second section captured demographic information. The charts below provide the demographic information of the fifty-two participants.

Figure 1, presents the age of the participants at the time of the interview. Accordingly, 21% were between the ages of 20-29; 46% were between the ages of 30-39; 19% were between 40-49 and 13% were 50 years old and up.



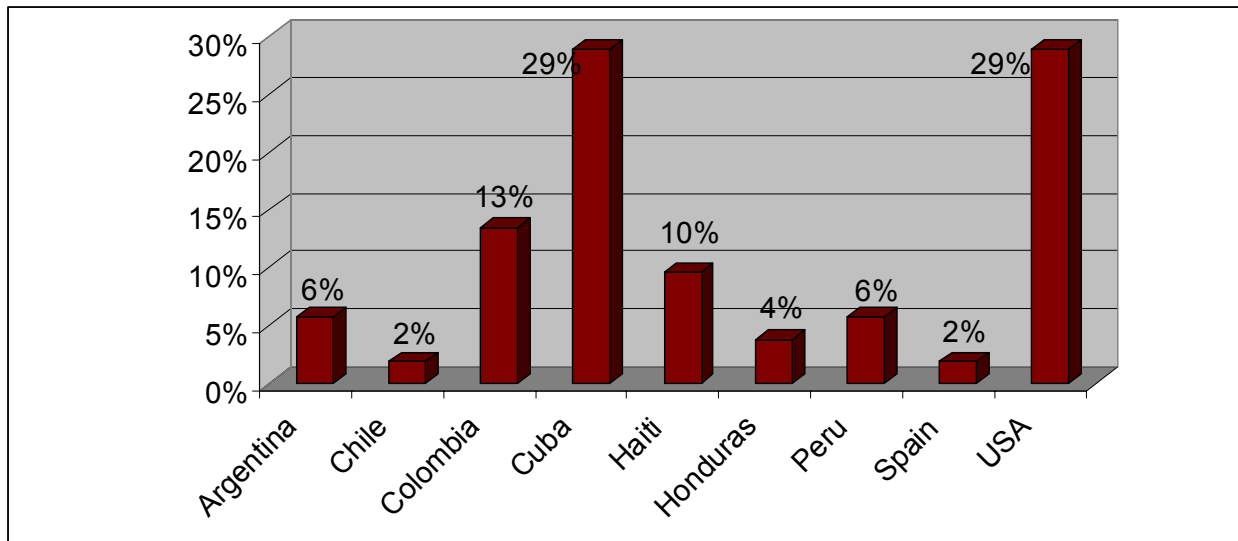
### Place of birth

Figure 2 illustrates that all of the participants Place of birth. 29% were born in the USA, the rest of the participants were from Haiti and Latin American countries (Accordingly, 6% were born in Argentina, 29 % Cuba, 4 % Honduras, 6 % Peru, 2 % Chile, 2% Spain, 13% Colombia) and all participants with residence in Miami, Florida.



### Ethnic group

A 62% of participants were white/ Hispanic, 10% White/Anglo, 8% Native American and 21% African Americans.



## Marital Status

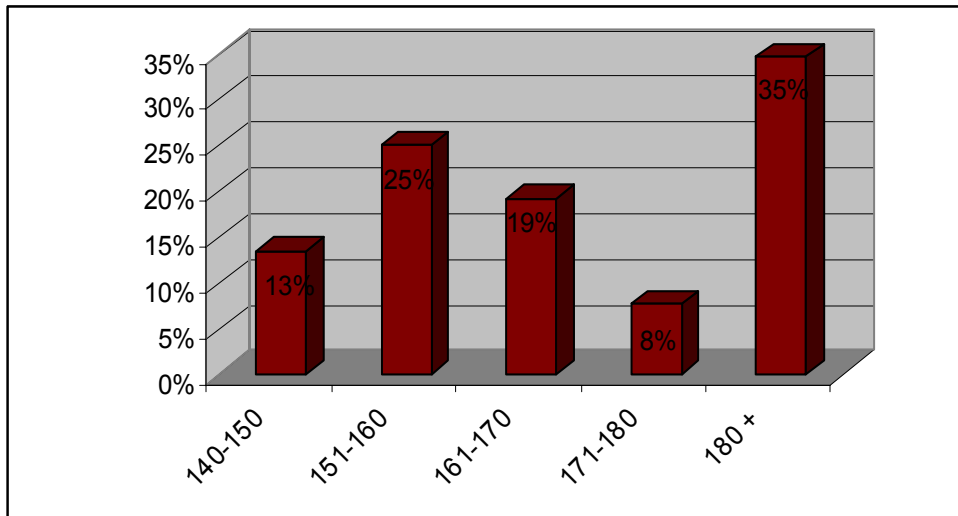
From the total of 52 participants, 73% were married and 27% were in a serious relationship living with their partners.

## Educational level

A 33% of participants were high school graduates and a 67% had college education.

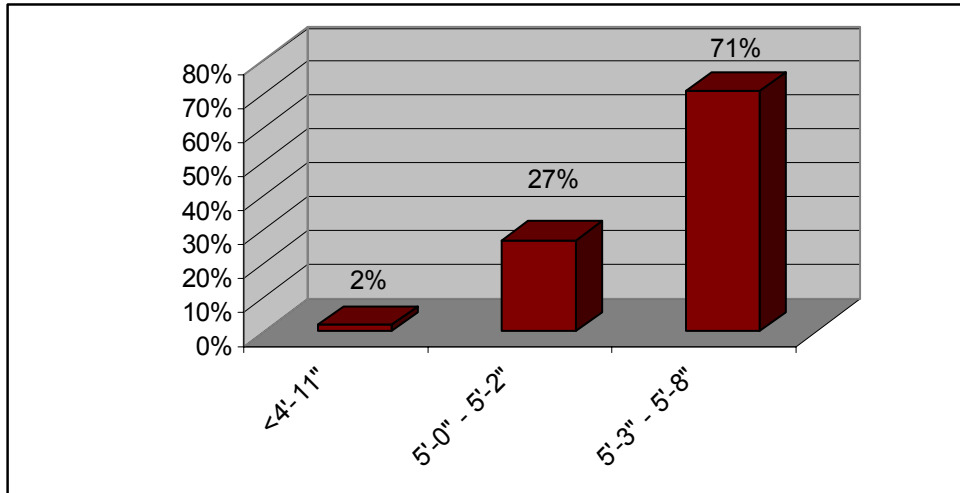
## Weight

140-150	151-160	161-170	171-180	180 +
13%	25%	19%	8%	35%



## Height

4'-11"	5'-0" - 5'-2"	5'-3" - 5'-8"
2%	27%	71%

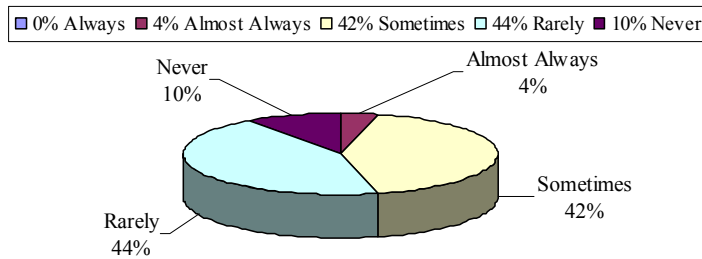


### Section Three:

QUESTION 1: Do you feel sexually attractive?

Participants in the study reported that sexual attraction provides that extra incentive that accounts for a marked increase in desire. It's a regenerating energy; they agreed and added that when they feel attractive they can anticipate partner's reaction. They can feel the desire with anticipation (pounding heart, butterflies in the stomach, sweating palms, weak knees, euphoria and so forth). Although, they experienced these feelings in the past, 44% reported to feel rarely and 10% never attractive. The majority, 44% of the participants felt unattractive, uncomfortable

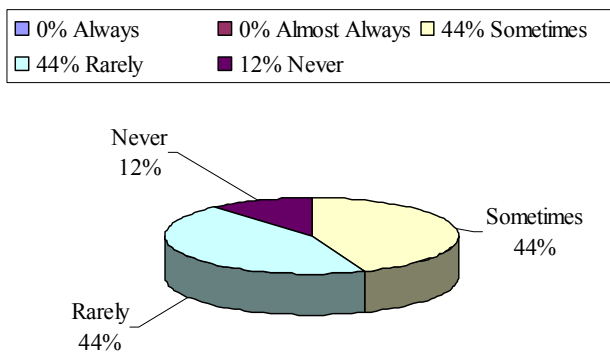
and insecure, some added to feel rigid during sexual encounters.



QUESTION 2: Do you feel comfortable with your body weight?

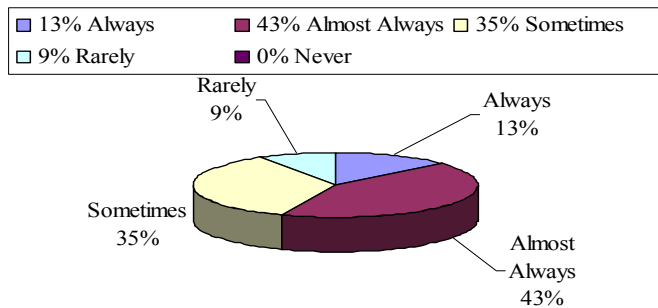
Forty four (44%) of participants reported Sometimes, 44% Rarely and 12% Never comfortable, only 4% of the participants reported to feel comfortable Almost Always.

Participants reported that because of the pressure to be thin and attractive, many experience as if their relationship has lost the spark and the ability to make them feel desired. They were uncomfortable with their weight and with their general appearance and consequently they were not able to relax during intercourse. Participants reported to have difficulty lubricating which is an indicative of sexual arousal.



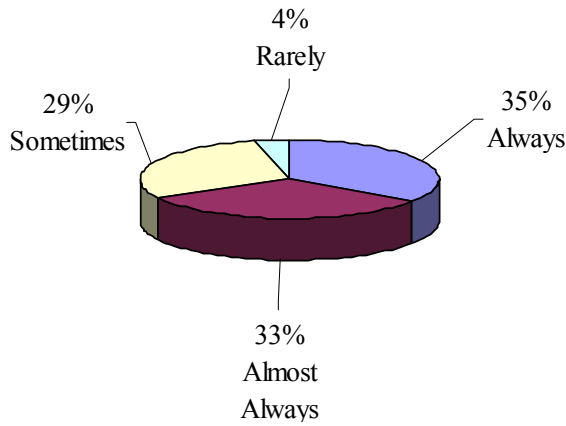
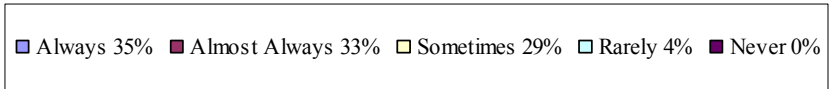
QUESTION 3: Do you place a great deal of importance in your body shape?

The answers from some of the participants were: “I am still searching for an identity but I cannot find myself among the images available in magazines, cable TV and the internet”. They feel that their role in society and their image make them invisible. This invisibility creates a need for compliance with society’s demands. As so, participants place a great deal of importance to their body shape.



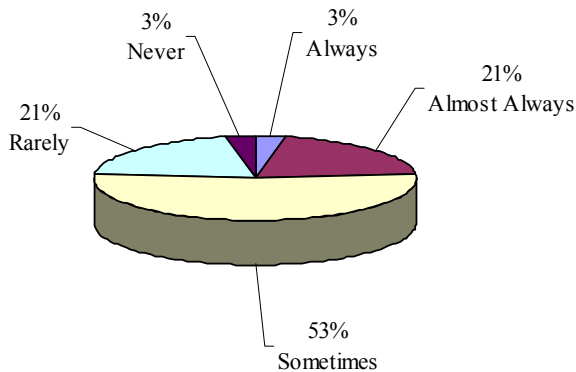
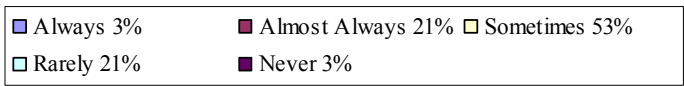
QUESTION 4: Do you feel fat?

Some of the participants reported that when they were making love, they tend to feel self-conscious about their body. Others reported that they feel fat all the time, which affects their intimacy. The majority of the participants feel fat during their intimate moments but they are able to enjoy themselves anyway as they reported “I understand that making love is the act derived from love and affection”; these participants forget about having an orgasm and concentrate on enjoying their feelings which in turn is the way to orgasm.



**QUESTION 5: Do you feel uncomfortable with any part of your body?**

A total of 53% of the participants reported that sometimes they feel uncomfortable with their body. If yes, how often this discomfort impedes you from reaching an orgasm? Participants in general were not well informed about female orgasms and many reported that they experienced pleasure but never the final sensation they hear people talking about. One participant explained: “I never before connected the idea that having an orgasm could be affected by my discomfort with my weight. Now I have become aware and I can see my constant preoccupation during sex if my partner will notice my big arms?”





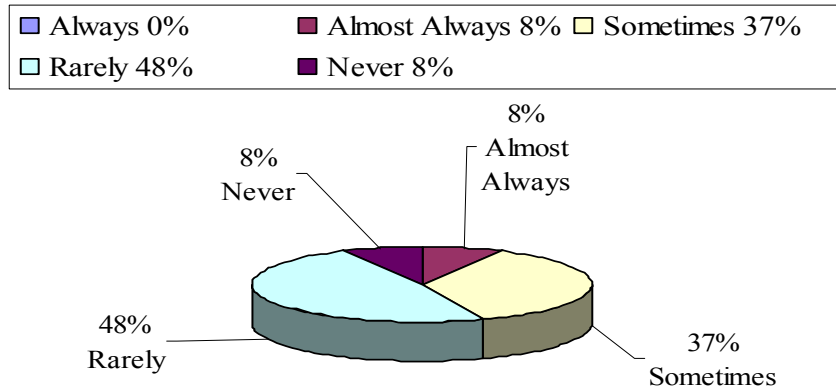
QUESTION 6: How often do you masturbate?

Some women masturbate very often, this is normal. Others never attempted to do it. However, once women discover masturbation, they do not let it go, is the way, according to participants, in which they can release their sexual frustrations.

According to research by S. Hite:

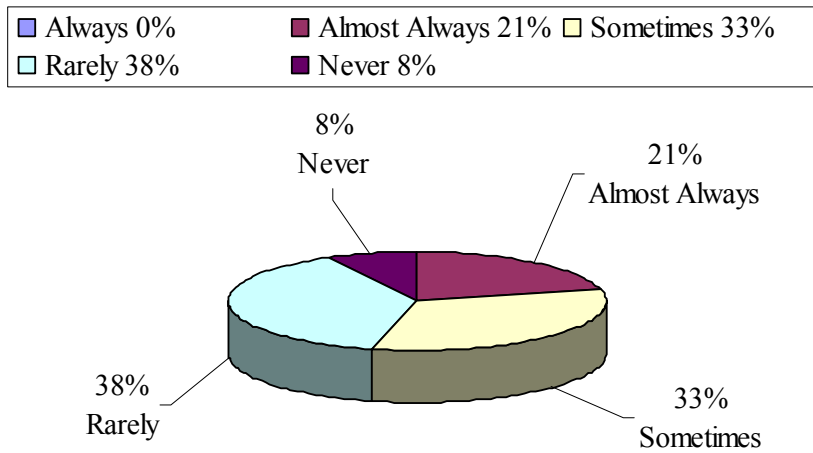
Masturbation is one of the most important subjects to discuss. It is a cause for celebration, because it is such an easy source of orgasms for most women, as well as a way into understanding the type of stimulation each individual woman needs; her unique style of masturbation is self-tailored especially to suit her needs for orgasm. Women in my research say they can masturbate to orgasm with ease in just a few minutes, often more than once. (Of the 82 percent of women who said they masturbated, 95 percent could orgasm easily and regularly, whenever they wanted.) Many women use the term "masturbation" synonymously with orgasm: women assume masturbation includes orgasm. (<http://www.hite-research.com/artmasturbation.html>).

In this study the numbers reflect a 37% of the participants answered sometimes and a 48% reported rarely ever they masturbate.



QUESTION 7: How often do you reach an orgasm when you masturbate? Only 21% reported to have orgasm regularly when they masturbate. Thirty eight percent ( 38%) rarely reach orgasm; 33% sometimes; and 8% never experience an orgasm through masturbation. In the past, the

belief was that mature women had their orgasms through intercourse (Freud 1938). However, today we know that clitoral stimulation is necessary to reach an orgasm.



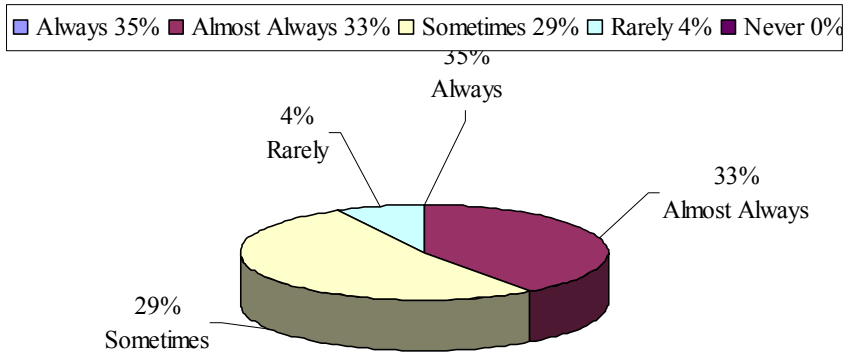
QUESTION 8: Do you have a partner?

All Fifty two (52) participants in this study have a partner.

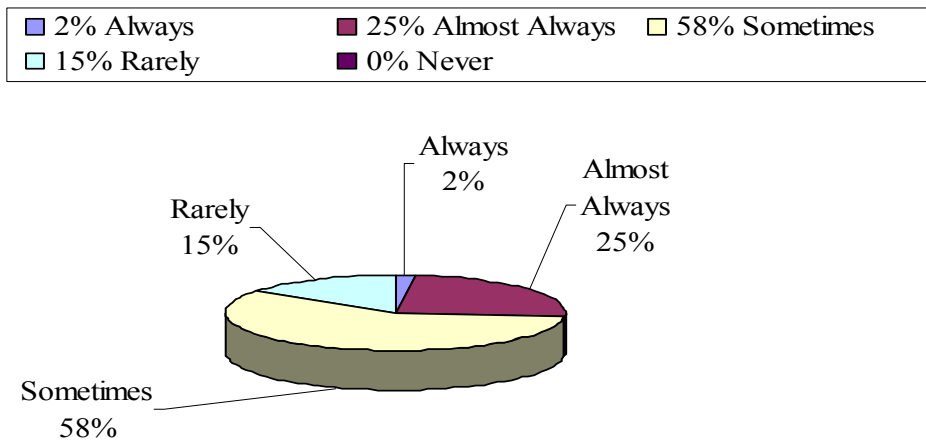
QUESTION 9: Do you feel emotionally connected with your partner?

Forty percent (40%) reported to feel connected with their partner almost always. Fifty two percent (52%) felt that sometimes they felt connected. The remaining 8% reported that their poor self image negatively affects the relationship dynamics; which in turn tends to diminish their communication.

While both males and females may be “turned off” when angry with their partner, this is more true for women. Females loose desire for their partners when they are hostile, upset and angry. “The factors affecting desire are biologic and inhibition of desire lies in the neural organization, the balance of hormones and neurotransmitters that make desire the subject that influences sexual pleasure” ( Kaplan 1979, 15).



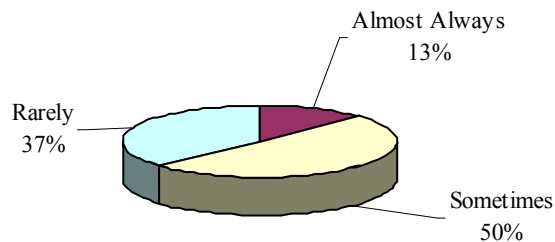
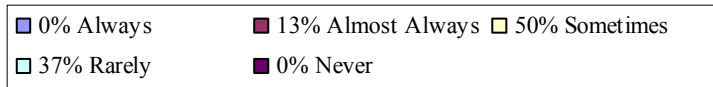
QUESTION 10: How often do you experience desire and/or interest for sexual activity?



QUESTION 11: Do you initiate sexual activity?

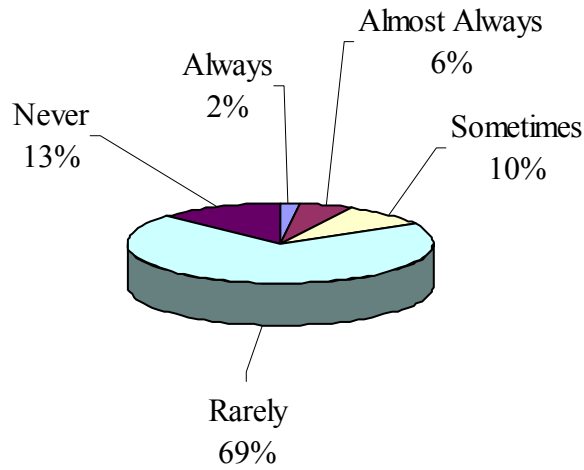
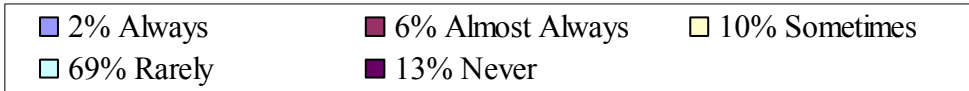
Blumstein & Schwartz 1983; Brown & Auerback 1981; Byers & Heinlein 1989 found that “Men initiate sexual interaction in marital and cohabiting relationships more frequently than do women. Despite male predominance in overt initiation attempts, eventually women seem to become more comfortable in initiating sex with their partners” (in McKinney, K. 1991). This

study confirmed that 50% of the women sometimes initiates sexual activity , 37% Rarely, and 13% almost always initiate sexual activity.

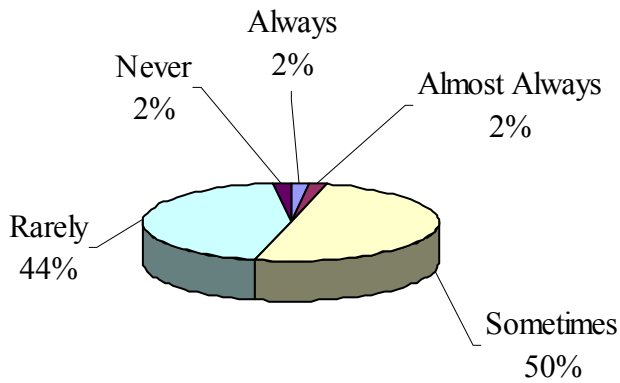
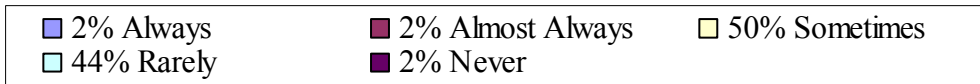


QUESTION 12: Do you feel comfortable when you are completely naked during sexual activities?

Participants report they have ways to cover up in front of their partners, they feel uncomfortable, they do not feel sexy and they are not happy about their partners looking at them naked. Sixty nine percent (69%) of the participants reported to rarely feel comfortable when they are naked during sexual activities, 10% sometimes comfortable, 6% almost always comfortable, 2% always comfortable and 13% never feel comfortable. However, 69% of the fifty two participants reported that they rarely fell comfortable.

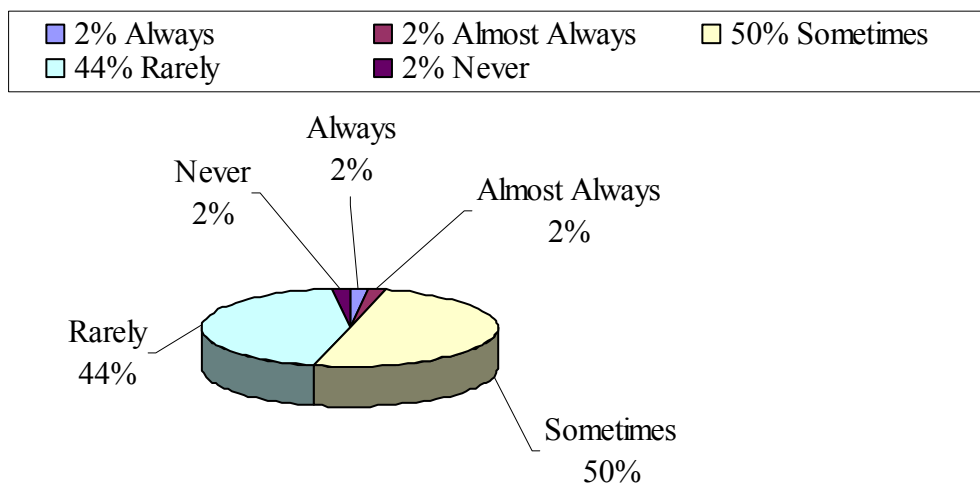


QUESTION 13: Do you engage in sexual activity with your partner such as: petting, genital contact or other activity intended to obtain sexual pleasure and reach an orgasm?



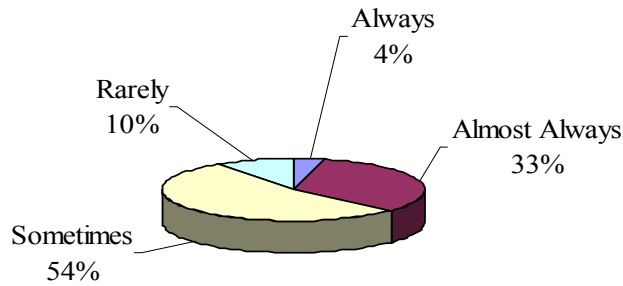
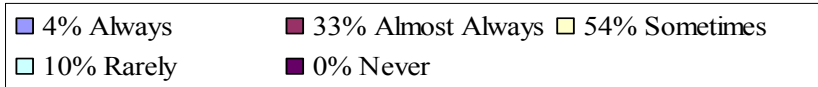
QUESTION 14: Do you enjoy being touched on your genitals?

Forty six percent (46%) responded Yes, they do enjoy being touched on their genitals and fifty four percent (54%) reported they do not enjoy being touched on their genitals. Of those participants that responded yes, thirty one participants or 6% reported that they enjoy being touched on their genitals with partner's, of the total amount, ten or 2% participants reported with partner's mouth and only two participants or .5% reported to enjoy being touched in any other parts of their body.



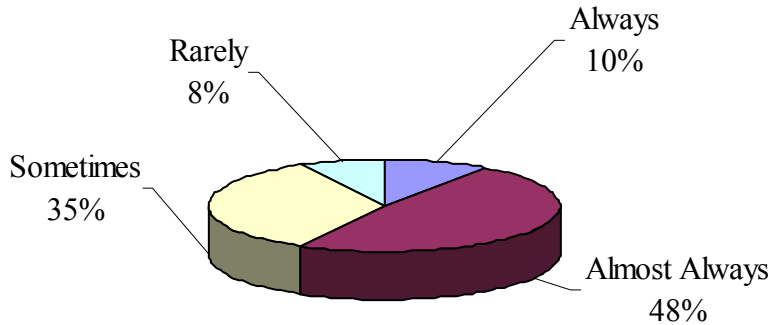
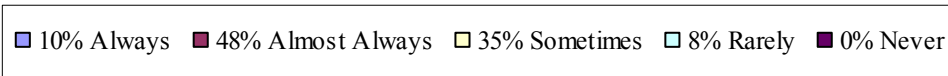
QUESTION 15: When your partner sexually approaches you, do you accept?

Most of the participants report that they accept their partners approach, they said: "I don't want to make him feel rejected" or "Why should I do that, he desires to be with me and this is a validation for me". Participants expressed that having their partner's interested in having sex, is uplifting and rewarding "It makes my self esteem go up for a day or so".



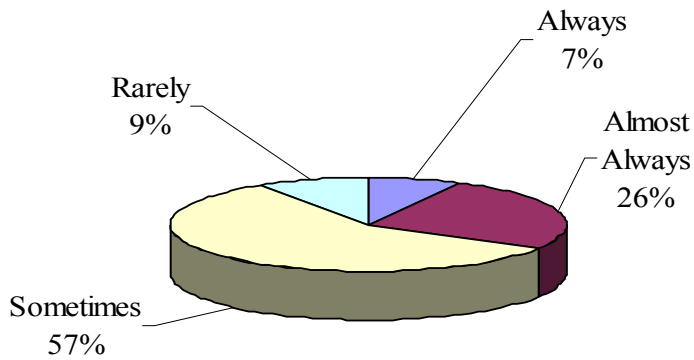
QUESTION 16: Does your partner accept your sexual approaches?

Participants revealed to have difficulty approaching their partner. “I hardly approach my partner, isn’t that something men do?”



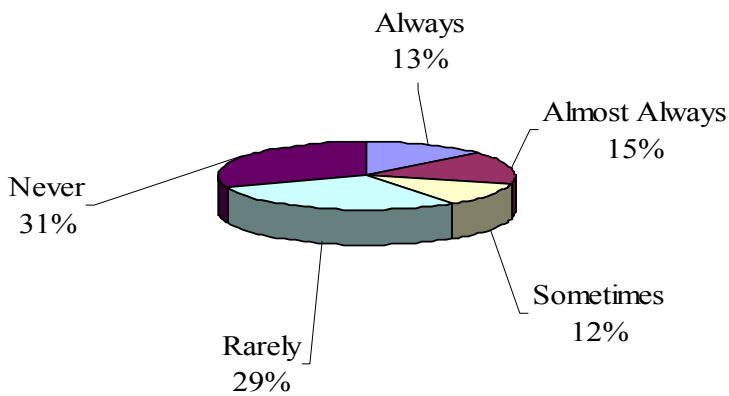
QUESTION 17: When your partner caress you, do you become aroused: example, feeling excited or noticing physical changes in your body like breathing quickly, heart beating faster, sweating? Participants reported to be preoccupied about their physical appearance during sexual intercourse. This preoccupation creates difficulty in relaxing and enjoying the moment. A total of 57% reported that only sometimes they can experience arousal and excitement.

7% Always 26% Almost Always 57% Sometimes 9% Rarely 0% Never



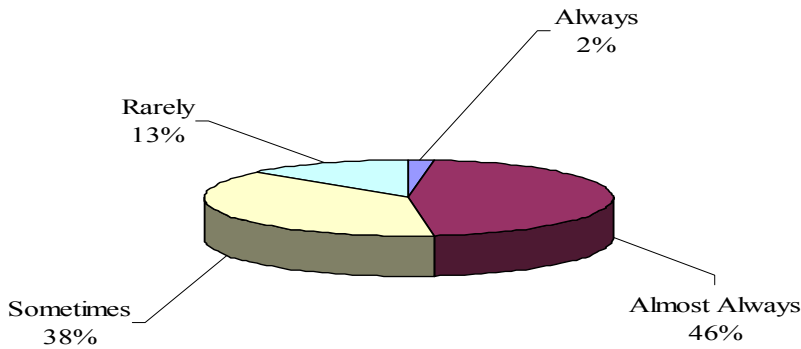
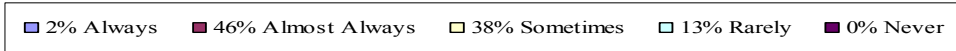
QUESTION 18: When sexually approach by your partner, do you experience unpleasant feelings such as tension or anxiety?

13% Always 15% Almost Always 12% Sometimes  
29% Rarely 31% Never



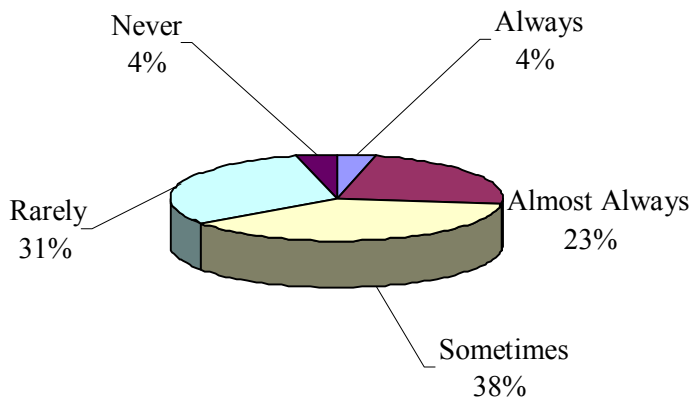
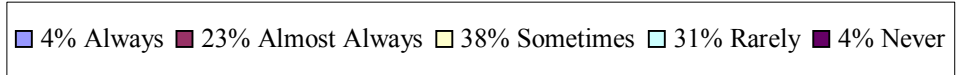
QUESTION 19: Is your partner attentive to your sexual needs?





**QUESTION 20: Do you experience an orgasm?**

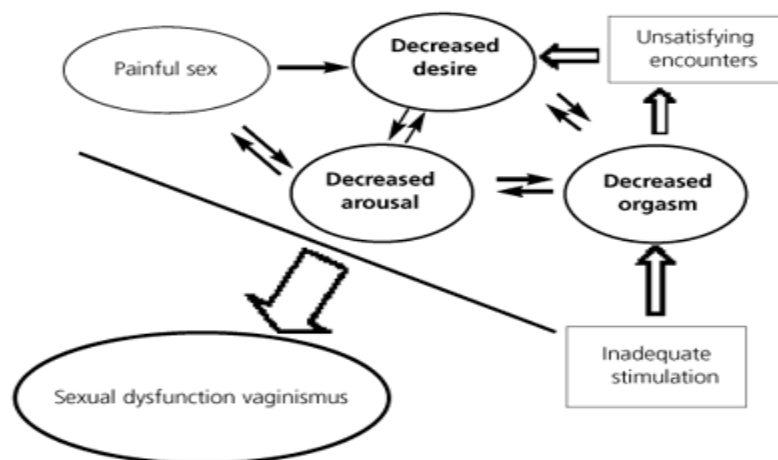
Thirty eight (38) of the participants reported that only sometimes they experience an orgasm and they were eager to offer details: “In the mornings, if I have a sexual dream, if I can have sex at that moment, I will have an orgasm. This happens regularly”. Others inform “I have to put candles around the room, music, have a massage and my husband has to go the extra mile and even doing that does not mean that, I will have an orgasm. That is the reason why for me is only sometimes that I can experience an orgasm”.



**QUESTION 21: Do you experience painful intercourse?**

According to Phillips, N. “Treatment of orgasmic disorders relies on maximizing stimulation and minimizing inhibition” (2000). It was important to investigate if there is a correlation between overweight women’s inhibition and difficulty reaching an orgasm and/or the presence of painful intercourse (Vagisnismus or Dyspareunia).

Following chart obtain from <http://www.aafp.org/afp/20000701/127.html>



**FIGURE 1.** Cycle of sexual dysfunction. Example showing how a patient can enter the cycle of sexual dysfunction in one area (i.e., decreased orgasm) and proceed to another area (i.e., decreased desire) so that the presenting complaint may not represent the problem that actually requires evaluation and treatment. Adapted with permission from Phillips NA. The clinical evaluation of dyspareunia. *Int J Impot Res* 1998;10(suppl 2):S117-20.

Also it is important to consider the fact of overweight women’s medical conditions if any. Phyllis, N. reported “Medical conditions are a frequent source of direct or indirect sexual difficulties. Vascular disease associated with diabetes might preclude adequate arousal; cardiovascular disease may inhibit intercourse secondary to dyspnea (*Table 1*). All the participants in this study reported that they never experience painful intercourse. Some participants provided reasons such as “I use a lubricant if I feel dry and I do not experience pain”.

## Chapter 6: CONCLUSION, LIMITATIONS, AND IMPLICATIONS OF THE STUDY

Love and sex provide a special feeling that generates an experience of emotional security in individuals. This is a valuable experience for the well being and happiness and even physical health of individuals. Committed relationships have additional ingredients as understanding and communication become part of the relationship providing more benefits to the romantic partnership. We understand the importance of sexual satisfaction for the relationship. A mutually caring relationship with love and a healthy sexuality bolsters self esteem and grants opportunities to improve each day the partnership with mutual affection, trust and caring.

A satisfying sex life may encourage a couple to stay together and raise a family, fostering intimacy between partners, providing pleasure, strengthening self-esteem and reducing tension and anxiety. This study found that overweight women who lack self-esteem and are insecure and overly preoccupied about their appearance have difficulty lubricating, rejoicing and finding satisfaction during intercourse.

The Kinsey Institute reports “sexual release may be psychologically necessary for some people, but abstaining from sexual activity, including masturbation, carries no known physical health risks. Some people are quite satisfied to be without sexual release for extended periods of time or even their entire lives, while others find lack of regular sexual release unsatisfactory”. Although the Shere Hite report suggest (2005) many women masturbate, this study found that a total of 48% overweight women rarely masturbate and 8% report that they never masturbate.

### Limitations of Study

The vast majority of the participants, sixty one percent (61%) were from Latin background, with a college education. This limited the sample population and may have skewed the results. Further studies with overweight women at all levels of the social strata would amplify

the results. Future research with a larger sample using more representative population of overweight women in the United States could show more in-depth results. Additionally it is this researcher's opinion that there is a great need for studies similar to this one to be conducted with overweight women in same sex relationships.

### Implications of the Study

It is important to investigate in future studies how women negotiate their sexual experience with their partners. Particularly, how overweight women discuss the effects of being overweight and their difficulty reaching an orgasm with their partners. This will allow them both to examine through communication and empower their relationship. They can reach agreeable opportunities to implement techniques, decrease stressors and inhibitions in order for these women to reach an orgasm and feel comfortable. For that reason, further research will identify how the role of sex therapy can help in healing sexual image and improve the overweight women's orgasmic response. It is imperative to address the existing concerns regarding society's view of female body image; which represents one of the most powerful obstacles for overweight women to reach orgasm.

Finally, it is necessary to develop an integrative therapy approach that addresses overweight couples and their particular concerns. It should address itself to any issues they have that may affect their sexual life together. Obviously, our predictors would most likely be involved: not enough sexual communication, dissatisfaction with the body of one or both persons, and a lack of shared sexual joy. Those therapeutic and educational therapies deemed appropriate from the literature review might be included.

Regarding women's sexual images. Normandi and Roark (1998) write:

The cultural pressure to be 'superwomen,' and to look beautiful while doing it, creates women who are not only afraid of their own sexuality but many times they are actually repulsed by sex. How can a woman relax and enjoy intimate relationships while she is holding her stomach in? How can a woman enjoy sensual pleasure with her mate if she is constantly worried about her cellulite? How many times does a woman go to bed and have sex simply because it is expected of her? And if she said no, would she ever be asked again, especially if she thinks she is overweight, old, ugly or somehow not 'sexy'? How often do women simply stop eating because they don't want to have hips or thighs - the very parts that make us women? How many women starve themselves in order to look unwomanly and thus asexual? (p. 7)

The existence of sexual self-rejection in women was validly documented with the participants' self disclosure. They stated: "my husband tells me to loose weight because he cannot look in the mirrors of our bedroom when we are having sex, he rejects my body image" and "I know my husband does not find me attractive anymore. I do not enjoy sex because I cannot relax anymore" another issue was "I do not exercise, why I should exercise? Why should only be my sacrifice? He is overweight as well as I am".

In sum, women who have issues with their weight should be educated to understand and accept the idea that large bodies can be attractive.

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## APPENDIX A

### Body Mass Index (BMI) Table

BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Height (inches)	Body Weight (pounds)																
4'10" (58")	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167
4'11" (59")	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173
5' (60")	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179
5'1" (61")	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
5'2" (62")	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191
5'3" (63")	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197
5'4" (64")	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204
5'5" (65")	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
5'6" (66")	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216
5'7" (67")	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223
5'8" (68")	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230
5'9" (69")	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236
5'10" (70")	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243
5'11" (71")	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250
6' (72")	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258
6'1" (73")	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265
6'2" (74")	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
6'3" (75")	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279
6'4" (76")	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287

**BMI : 19 to 24:** Normal  
**BMI: 32 to 43:** Obese

**BMI: 25 to 31:** Overweight  
**BMI: 44 and more:** Extreme Obesity

Calculation: [weight (lb) / height (in) / height (in)] x 703    **Example:** Weight = 150 lbs, Height = 5'5" (65")

## APPENDIX B

### SURVEY CONSENT

My name is Odalys J. Waugh. I am a Licensed Psychotherapist and a Certified Clinical Sexologist. I work in private practice in the North of Kendall area. I am also the administrator for the Elderly Services program at Victim Response, Inc. I am working on a PhD. in Clinical Sexology from the American Academy of Clinical Sexologists, Orlando, Florida. This survey is part of my doctoral research dissertation. This survey is for those women that are overweight (25% above normal standards on the Body Mass Index scale) and want to share information regarding their orgasmic response. The criteria for the survey include:

- You must be 20 years old or above.
- You must be overweight as per the definitions in this research (25% above BMI normal Standards).
- Have an interest in providing information regarding orgasmic response experiences.

This investigation is anonymous. You do not have to reveal your name. Please be assured that any identifying information will be kept confidential. The results of this study will be used for the purpose of completing the requirements for the doctoral dissertation and will be included in future publications.

Thank you for taking the time to complete this survey and for your cooperation.

Odalys J. Waugh, LMHC, CCS

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305-491-5223

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Participant

**APPENDIX C**  
**DEMOGRAPHICS**

1. Age: \_\_\_\_\_ 2. Place of Birth \_\_\_\_\_

3. Ethnicity and Race:

Latin/White

Anglo

African American / Black

Native American

4. Marital Status: \_\_\_\_\_

5. Educational Level: \_\_\_\_\_

6. Weight \_\_\_\_\_

7. Height \_\_\_\_\_

## APPENDIX D

**Read carefully and provide answers to the following questions: During the last 4 weeks, have you experienced any of the following statements?**

<b>Read carefully and provide answers to the following questions: During the last 4 weeks, have you experienced any of the following statements?</b>	<b>Always</b>	<b>Almost always</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
1. Do you feel sexually attractive?					
2. Do you feel comfortable with your body weight?					
3. Do you place a great deal of importance in your body shape?					
4. Do you feel fat?					
5. Do you feel uncomfortable with any part of your body  Yes <input type="radio"/> No <input type="radio"/>  If yes, how often this discomfort impedes you from reaching an orgasm?					
6. How often do you masturbate?					
7. How often do you reach an orgasm when you masturbate?					
8. Do you have a partner?  Yes <input type="radio"/> No <input type="radio"/>					
9. Do you feel emotionally connected with your partner?					
10. How often do you experience desire and/or interest for sexual activity?					
11. Do you initiate sexual activity?					

	<b>Always</b>	<b>Almost always</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
12. Do you engage in sexual activity with your partner such as: petting, genital contact or other activity intended to obtain sexual pleasure and reach an orgasm?					
13. Do you enjoy being touched on your genitals  Yes <input type="radio"/> No <input type="radio"/>  In what way: <input type="radio"/> Partner's hand, <input type="radio"/> Mouth <input type="radio"/> Other part of your body					
14. When your partner sexually approaches you, do you accept?					
15. Does your partner accepts your sexual approaches?					
16. When your partner caress you, do you become aroused: example, feeling excited or noticing physical changes in your body like breathing quickly, heart beating faster, sweating?					
17. When sexually approach by your partner, do you experience unpleasant feelings such as tension or anxiety?					
18. Is your partner attentive to your sexual needs?					
19. Do you experience an orgasm?					
20. Do you experience painful intercourse?					