

**RECTIFICATION OF DIETARY MISCONCEPTIONS
AND PRACTICES AMONG OBESE FEMALE
STUDENTS**

Thesis

**Submitted for partial fulfillment of Doctorate Degree in
Community Health Nursing**

By

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**Faculty of Nursing
Ain Shams University**

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LIST OF ABBREVIATIONS

U.S	United states
NNI	National Nutrition institute
BMI	Body mass index
Wt lose P	Weight program
TV.	Television
A.T	Adipose tissue
HDL	High Density Lipoprotein
LDL	Low Density Lipoprotein
NHS	Nurse Health specialist
U.F.S	University Female student
MAOIs	Monoamino oxidase inhibitors
NPY	Neuropeptide
NIH	National institutes of Health
DXA	Dual X-ray Absorptiometry
VLCD	Very low calories diets
WHR	Waist to-hip ratio
OTC	Over the counter
F-HT	5-hydroxytryptamine
FDA	Food and drug administration
CHF	Congestive heart failure
GP	General practitioner

ABSTRACT

Dietary misconception and practices related to obesity play a part in adolescents and adult obesity because it is considered main contributing factor to obesity/This study **aim** evaluating the effect of program on rectifying dietary misconception and practices among female obese students/ **A** quasi experimental study was done on 98 single obese student who used weight control program and failed in weight loss at age between (18 – 20) and body mass index (BMI) are 30 or more in Faculty of girls Ain Shams University/ **Three tools** were used pre and post the program application to collect the data, self administrative questionnaire sheet, physical assessment sheet and sheet about physical and Psychological students self esteem/ **The results** of the study revealed that the highest percentage of students 83,1% were the first in birth order, followed by those who were second in birth order, more than half (56,0%) of mothers were working. The main ecological factors were positive family history of obesity, high caloric intake, eating while watching TV, diminished level of physical activities and psychological factor as depression. There was highly significant difference of obese before weight lose program application and university student girls after weight lose program application regarding to food ,sleeping ,activities habits,. Higher percentage of studied sample were misconception and lack knowledge about obesity and low self esteem before the program application compared to after program application were no misconception, high self esteem and high knowledge about obesity /**Further studies are recommended** to make healthy life style diet program under medical supervision and including parents in this program to assist students in changing their false behaviors and misconception towards obesity.

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INTRODUCTION

Obesity is a serious chronic medical condition which is associated with a wide range, of debilitating and life threatening conditions (**Flega and Carroll, ۲۰۰۵**).

(**Nammis, et al, ۲۰۰۴**), define obesity as state of imbalance between calories ingested versus calories expended which would lead to excessive or abnormal fat accumulation.

(**Ellis, et al, ۲۰۰۰**) Mentioned that for adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the "body mass index" (BMI). BMI is used because, for most people, it correlates with their amount of body fat:

It is important to remember that although BMI correlates with the amount of body fat, BMI does not directly measure body fat. As a result, some people, such as athletes, may have a BMI that identifies them as overweight even though they do not have excess body fat (**Souhami R, maxham J, ۲۰۰۲**).

Other methods of estimating body fat and body fat distribution include measurements of skin fold thickness and waist circumference, calculation of waist-to-hip circumference ratios, and techniques such as ultrasound, computed tomography, and magnetic resonance imaging (MRI) (**Kuczmarski, ۲۰۰۰**).

Obesity can be described as the new world syndrome is prevalence is on continuous rise in all age group of many of the developed countries in the world. Statistical data reveals that the problem of obesity has increased from ۱۲ – ۲۰% in men and from ۱۶ – ۲۵% in women. In Egypt,

obesity constitute 14.62% from total population. (W.H.O, 2007, *Musta*, 1997).

The etiology of obesity is seeded in multiple factors which alter regulation of energy balance, either by increased energy intake and reduction in the quantity of energy expenditure which result in excess accumulation of adipose tissue (*Myers and Vargas*, 2000).

Risk factors of obesity are complex and multi factorial chronic disorder. Increasing evidence suggest that obesity is not a simple problem of self control but is a complex disorder involving appetite regulation and energy metabolism. Obesity can be related to a combination of genetic, nutritional, socioeconomic, physical activity, environmental and endocrinal factors (*Taylor and Muller*, 1999).

The management of weight problem should address the process of weight gain many people say that they want to lose weight most of them are able to do so using a variety of approaches, but many are not prepared to adopt the permanent life long change in diet and life style needed to prevent regain. The groups of patients who need professional (Medical) weight management are those who are unable to control a weight problem using self help methods which consider most common health malpractices (*Poston and Foreyt*, 2000).

Obesity management recognizing the etiology of obesity and its medical consequences, it is vital that doctors take a leading role in advising patient about the need for and methods of weight management as dietary therapy, physical activity, behavior therapy, pharmacotherapy, surgical and herbal medicine. (*Souhami and Maxham*, 2007).

Practice nurses are ideally placed to help primary care prevention strategies for the obese individual. Opportunistic screening can be considered as part of a primary prevention strategy e.g. BMI and waist circumference measurements such as a strategy can be managed by the practice nurse or obesity nurse specialist in obesity management (NICE, 2006). This form of primary care prevention strategy should identify individuals who need to lose weight or require counseling in order to prevent additional weight gain (**Crombie, 1999**).

Obesity has, historically, not had a high priority within the nurse health specialist (NHS), largely because of the widespread misconception that obesity is not a medical problem but a lifestyle choice and other common misconceptions potatoes make you fat, drinking while you are eating is fattening. There are some magical foods that cause weight loss, obesity caused by an over dose of sweet and food combining should be avoided (**Yahoo.com, 2007**).

Most common malpractices related to obesity eating while watching TV, eating too rapidly, eating when not hungry and using self help methods to decrease body weight. This is very dangerous on body health. This diet misconception and practices are related to obesity more common among girls (**Kuchier and, variyam, 2008**).

AIM OF THE STUDY

The study aims to rectify dietary misconceptions and practices among female university obese students through:

١. Identifying dietary misconception and practices among female obese students
٢. Assessing female obese students needs
٣. Designing an intervention guidelines based on their assessment needs.
٤. Implementing the intervention guidelines on female obese students.
٥. Evaluating the effect of program on rectifying dietary misconception and practices among female obese students

Research hypotheses

The intervention program has a positive effect on rectifying dietary misconception, improving practices and in decreasing obese students' body weight.

DEFINITION OF OBESITY

There is a critical distinction between obesity and overweight. defined obesity as an increase in body weight resulting from an excessive accumulation of fat or simply the state of being too fat, whereas overweight refers to the state of weighing more than average for height and body build, which may or may not include an increased amount of fat (W.H.O, 2000).

Others defined obesity as a condition in which a person's weight is 20% to 30% or more above his or her ideal weight for sex, height and age. Overweight in contrast is described as a condition in which the person is 10% over the ideal weight. (Jackson et al., 2009).

Obesity means having too much body fat. It is different from being over weight, which means weighing too much the weight may come from muscle, bone, fat and /or body water. Both terms means that a person weight is greater than what's considered healthy from his or her height (W.H.O, 2000).

(Ellis, et al, 2000) stated that Obesity can also be defined as BMI greater than or equal to 30 kg per m². Classified obesity according to BMI into 3-grades:

Grade I obesity BMI 30 – <35

Grade II obesity BMI 35 - < 40

Grade III obesity BMI ≥ 40

The world health organization for muated an index known as the body mass index (BMI), it is based on the patients in metres and weight in kilograms: BMI = weight kg/ height m²) (Berke and modern, 2000).

Waist circumference

Abdominal obesity is assessed through measurement of WC. An increase in WC carries a greater risk of development of future cardiovascular events and diabetes than increased BMI. Abdominal obesity is now recognized as a central component of the metabolic syndrome. Various measurements were used to define the threshold of WC which is considered the upper limit of normal. The cutoff points are arbitrary and are population and gender specific (*Alberti KGM, Zimmet P, Shaw J. ۲۰۰۵*).

Importance of WC measurement

- Abdominal obesity characterized by high WC is a stronger predictor than generalized obesity defined by elevated BMI of subsequent development of major coronary events, vascular mortality, diabetes and metabolic syndrome.

Men and women who have WC greater than ۱۰۲ cm and ۸۸ cm, respectively, are considered to be at increased risk for cardiometabolic disease^{۱۲}. Furthermore, increased WC is a central component of the metabolic syndrome (MS). Recent IDF guidelines definition of MS^{۱۳} identify an increased WC as a prerequisite for diagnosis.

- WC can identify persons who are at greater cardiometabolic risk than those identified by BMI alone.

No clear evidence that WC provides clinically meaningful information that is independent of well-known cardiometabolic risk factors (*Alberti KGM, Zimmet P, Shaw J. ۲۰۰۶*).