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BEHAVIORS OF MILITARY PERSONNEL TO ATTAIN OR MAINTAIN DESIRED WEIGHT PRIOR TO MANDATORY WEIGHT SURVEILLANCE

A Thesis

Presented in Partial Fulfillment of the Requirements for the degree Master of Science in the Graduate School of the Ohio State University

by

Janice Lynne Varda, RNC, BS

* * * * *

The Ohio State University

1989

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1989

THESIS ABSTRACT

THE OHIO STATE UNIVERSITY
GRADUATE SCHOOL

NAME: Varda, Janice Lynne QUARTER/YEAR: Winter, 1989

DEPARTMENT: Nursing DEGREE: M.S.

ADVISER'S NAME: Bininger, Carol J.

TITLE OF THESIS: Behaviors of Military Personnel to Attain or Maintain Desired Weight Prior to Mandatory Weight Surveillance.

The purpose of this study was to identify preparatory behaviors of military personnel to attain or maintain desired weight prior to mandatory weight surveillance. An investigator designed questionnaire comprised of a demographic section and a list of 21 potential weight reduction behaviors was distributed to active duty military personnel (n = 1,165) at a midwestern Air Force Base. Twenty of the 21 behaviors were practiced by the respondents prior to weight surveillance. There was a significant difference between behaviors used by individuals meeting weight standards compared with individuals not meeting standards. There was no significant difference in behaviors used according to gender.

Keywords: Military Requirements, (EG)

Carol J. Bininger
Adviser's Signature

DEDICATION

To my husband, Tony, who believes I can excel in all of my pursuits.

To my parents, CMS (Retired) and Mrs. Roland Bonica, who showed me that the Air Force is a great way of life.

To each person who participates in mandatory weight surveillance.

ACKNOWLEDGMENTS

I would like to thank the many people who helped me throughout the challenging research process and during the preparation of this thesis.

First of all, I am grateful to the United States Air Force for providing me with the opportunity to conduct this study. I wish to thank Captain Roger Goetz at Wright-Patterson Air Force Base for his wise counsel and support. I am indebted to Martha Adams, Cathy Constance, and Jackie Hough, medical library staff, USAF Medical Center, Wright-Patterson Air Force Base, for their support.

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I am extremely grateful to Dr. Carol Bininger, my thesis chair, for the time and energy she spent with me and for all that I have learned from her. She has been the greatest influence on my accomplishments. I would like to thank Dr. Nancy Ryan, my initial adviser and member of my thesis committee. Her wisdom and commitment to excellence in research are only two of the reasons she has been an excellent role model.

I would like to extend a special thank you to Darlene Rabe for her typing skills, motivation for perfection, and her warm smile.

Finally, I wish to express my deepest gratitude to my husband, Tony, for his encouragement and support throughout this challenging process.

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FIELD OF STUDY

Major Field: Nursing

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CHAPTER I

INTRODUCTION

Many occupations or professional fields require their members to possess or develop specific capabilities or attributes. Among the desired prerequisites may be work experience, specialized educational preparation, and/or technical expertise. Additionally, there are occupations that oblige employees to meet particular requirements relative to height, weight, strength, or endurance. This study is concerned with how persons required to adhere to clearly stated weight standards meet those standards prior to mandatory weight surveillance.

Purpose of the Study

The purpose of this study was to identify behaviors used by individuals to attain or maintain their weight standard prior to mandatory weight surveillance. Patterns of behaviors were identified. Differences between the behaviors of individuals meeting weight standards and individuals not meeting weight standards were examined and comparisons made between the behaviors of males and females. The research results will be valuable to nurses working with clients participating in mandatory weight surveillance. These results will provide a knowledge base from which nurses can more effectively

assist their clients to develop weight control techniques that promote optimal health and high-level wellness.

Statement of the Problem

Meeting weight standards may motivate some individuals to engage in unhealthy weight reduction behaviors. The problem explored in this study was: During the four weeks prior to their scheduled weigh-in, what do individuals participating in a mandatory weight surveillance program do to maintain or attain their weight standard?

Study Questions

The first study question was: (1) During the four weeks prior to mandatory weight surveillance what behaviors are used by persons who must be within a specified weight range by the time of the mandatory weigh-in? The second study question was: (2) During the four week time period prior to mandatory weight surveillance, how does the behavior of overweight individuals compare with the behavior of individuals meeting weight standards? The third study question was: (3) During the four week period of time preceding mandatory weight surveillance, how do the preparatory behaviors of men and women compare?

Operational Definitions

1. Mandatory weight surveillance: the weighing of all active duty Air Force personnel annually or semiannually as specified by Air Force Regulation (AFR) 35-11 (Appendix A).

2. An overweight individual: a person who exceeds the specified weight for sex and height according to AFR 35-11.

3. Maximum allowable weight (MAW): the highest acceptable weight for sex and height according to parameters established by AFR 35-11. (This weight is specified to the nearest one quarter pound.)

4. Preparatory behaviors: actions taken during the four weeks prior to mandatory weight surveillance; these actions are aimed at attaining or maintaining a desired weight.

5. Weight range groups (WRG): the classification of subjects according to specific parameters. WRG 1 consisted of individuals whose weight was below 10% of their MAW. WRG 2 consisted of individuals whose weight was within 10% of their MAW. WRG 3 consisted of individuals whose weight exceeded their MAW.

CHAPTER II

THEORETICAL BACKGROUND

Introduction

This chapter contains a review of the literature associated wit. mandatory weight surveillance and the conceptual framework that was used for this study.

Resources for the literature review were obtained from Psychological Abstracts, Medline, and sports and fitness data bases. Pertinent literature spanning the years from 1960 to the present was examined.

Lazarus and Folkman's (1984) stress, appraisal, and coping theory was used as the conceptual framework for this study. This theory was selected because of its emphasis on the person-environment relationship, "psychological stress," and coping efforts to deal with this stress.

Review of Related Literature

The focus of the literature search was weight surveillance as a means of assuring employee compliance with weight standards. In reviewing the literature, two types of individuals emerged. The first type of individual was the individual who was interested in weight control because of the nature of the occupation. Concrete numerical

weight standards were not specified for this individual. The second type of individual was required to maintain a weight below a specified level. Mandatory weight surveillance was used to assure compliance. The major distinction between these two types of individuals was that maintenance of weight below a specific number was crucial to participation or membership for the second type but not the first type. It was the second type of individual with which this study was concerned. Both types of individuals will be discussed below.

As reported in the literature, many of the first type of individuals were athletics or sports enthusiasts. The association between the athlete and weight is well documented in the literature. Recently more is being written about the athlete who has become eating disordered. Such athletes are said to have "anorexia athletica" (Fairbanks, 1987; Smith, 1980). Anorexia athletica is typified by a preoccupation with low body weight, desire for thinness, body dissatisfaction, and unhealthy eating patterns (Fairbanks, 1987). Fairbanks (1987) found that individuals who are at high risk for eating disorders are those who participate in sports which require mandatory weigh-ins or in sports that place an emphasis on "the body beautiful."

According to Borgen and Corbin (1986), dancers, aerobic instructors, cheerleaders, gymnasts, figure skaters, swimmers and long distance runners, though concerned with "the body beautiful," do not become focused upon their weight, per se. Yates, Leehey, and Shisslak (1983) who studied long distance runners reported that these runners were consumed by the need to have no more than 5 per cent body

fat in quest of superior speed. These runners manifested numerous symptoms characteristic of anorexic women (Yates, Leehey, and Shisslak, 1983).

Gymnasts are another group of athletes who reduce body fat to get maximum strength, endurance, and speed for their body weight (Smith, 1980). Results of a study of 41 female college gymnasts revealed that 24 per cent of the sample had used induced vomiting and/or laxatives or diuretics for weight control and that 61 per cent had engaged in binge eating (Costar, 1983). In another study, Lundholm and Littrell (1986) surveyed 751 high school cheerleaders. These researchers found that the more important the desire for thinness among subjects, the more likely the occurrence of eating problems.

Dancers must remain thin throughout their careers to please instructors, fit into costumes, and project a sublime image on stage (Maloney, 1983). In their studies, Evers (1987) and Maloney (1983) found dancers to be deficient in dietary nutrients and at greater risk for eating disorders when compared with nondancers. Frisch, Wyshak, and Vincent (1980) reported delayed menarche and amenorrhea in ballet dancers correlated with excessive thinness resulting from restricted food intake, undernutrition, high activity, and weight loss.

The second type of individual which emerged from the review of literature was the individual who was employed in an occupation requiring maintenance of weight below a specified weight value. It was the individuals in this group that were the focus of this study. The author interviewed two Delta Airlines flight attendants (Personal interview, Delta Airlines Flight Attendants, 1988) who affirmed that

flight attendant employment contracts specified a weight range for employees. According to these two flight attendants (Personal interview, Delta Airlines Flight Attendants, 1988) strict adherence to the weight standard (Appendix B) was enforced during the training period. Both flight attendants knew of trainees who used strict dieting such as "eating only apples and water" to maintain the desired weight during this period. Following training, attendants were weighed annually. Those not meeting standards were weighed quarterly and could be suspended if they did not lose the weight. An interview with a United Airlines Executive (Personal interview, United Airlines Executive, 1988) revealed that flight attendants were required to weigh in semiannually. Those exceeding standards (Appendix C) were given six months to lose weight before administrative action was taken.

The literature pertaining to mandatory weight surveillance included three studies of wrestlers and three single studies of university majorettes, racing jockeys, and lightweight racing crew members. Humphries and Gruber (1986) studied 11 female university majorettes who had to meet weekly target weights set by a faculty advisor. These subjects reported eating nothing and drinking very little two days prior to the weigh-in. They also exercised heavily, used saunas, took diet pills, and occasionally used diuretics. For several days after weigh-ins, they reported binge eating which caused them to gain back the lost weight (Humphries and Gruber, 1986).

King and Mezey (1987) studied 14 male racing jockeys and found that weight control was paramount. For a flat-race jockey, 105 pounds

was the target weight, whereas the jump jockey was allowed to weigh 133 pounds, including a two pound racing saddle (King and Mezey, 1987). Achievement of the desired weight was accomplished by food restriction (including fasts for up to six days), strenuous exercise, the use of saunas, abuse of laxatives, use of diuretics, and use of appetite suppressants. One subject reported engaging in self-induced vomiting.

Smith (1980) reported a case study in which a college lightweight crew candidate restricted his intake and increased his exercise so that his weight decreased from 172 pounds to 148 pounds. Other methods of weight loss (if used) were not documented and generalizability is limited since only one case was reported.

The "making of weight" in wrestling is the most controversial weight surveillance described in the literature (Tipton, 1980; Ribisl, 1975; Hansen, 1978; The American College of Sports Medicine, 1976; Ryan, 1981). According to Ribisl (1975) the extreme weight loss which wrestlers undergo to "make weight" before competition causes the controversy. The weight loss allows the athlete to wrestle in a lower weight classification and hopefully gain an advantage over a smaller opponent (Ribisl, 1975). Practices used to "make weight" were considered so hazardous that, in 1967, an Iowa County medical society passed a resolution to abolish interscholastic wrestling in their county (Tipton and Tcheng, 1970).

Tipton and Tcheng (1970) studied the body weight changes of 747 wrestlers from 30 Iowa high schools. The wrestlers studied lost an average of 6.8 pounds or 4.9 percent of their initial body weight.

Most of the weight loss occurred during the final ten days before a match. Weight gains following the end of the season exceeded the losses, with an average increase of 13.6 pounds above the certification weight. Respondents in the study consulted with their coach or other wrestlers rather than with a physician about how to attain the desired weight. Weight reduction was accomplished by decreasing food and fluids, increasing exercise, exercising in a hot environment, exercising while wearing a rubber suit, or a combination of these methods (Tipton and Tcheng, 1970).

Using a longitudinal study design, Zambraski, Foster, Gross, and Tipton (1975) studied the 11 members of the University of Iowa wrestling team over a four month period of time to determine if excessive weight loss accompanied by dehydration occurred at the collegiate level. At the end of the four months, the 11 members demonstrated a mean loss of six per cent of body weight. Urine samples analyzed during this period revealed electrolyte changes indicative of dehydration (Zambraski et al., 1975). Methods of weight loss used by the team members were not reported in this study.

Steen and McKinney (1986) surveyed 42 college wrestlers from the Eastern United States regarding nutrition and weight-control practices. During the season, diets of many wrestlers were deficient in calories, vitamins and many nutrients. Methods of weight control included food reduction, the use of saunas, wrestling in a heated room, wearing a rubber or plastic suit while exercising, and fluid restriction. The use of laxatives, diuretics, and vomiting was reported by members of one team (Steen and McKinney, 1986).

Finally, the military literature was reviewed for studies of weight surveillance of active duty military personnel. The sole study found in the literature search was conducted by Voge and Yacavone (1987) who described two aircrewmen diagnosed with bulimia. That research study was not relevant to this literature review. The lack of published studies concerning weight surveillance of military members is remarkable considering that each branch of the armed forces has a formal weight surveillance program. Thus, this study will generate new research regarding military weight surveillance.

Theoretical Framework

The stress, appraisal, and coping theory of Lazarus and Folkman (1984) was used as the conceptual framework for this study. The relationship between the individual and the environment is central to Lazarus and Folkman's (1984) concept of stress. Their theory is specifically concerned with psychological stress which is defined as "a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus and Folkman, 1984, p. 21). Cognitive appraisal is the process used by an individual to determine whether a person-environment situation is stressful.

The process of cognitive appraisal is crucial to comprehending Lazarus and Folkman's (1984) theory. It is this appraisal process that allows individuals to distinguish among experiences that may be harmful, threatening, or challenging and to consider the unique relationship between self and the environment at a specific time.

Cognitive appraisal includes processing one's reactions to a situation and the factors affecting one's reaction. Lazarus and Folkman (1984) refer to the "psychological situation" which is a product of the interplay of both environment and person factors. This is a complex process that, by nature, is subjective and is not necessarily conscious. Furthermore, the agendas that make up the appraisals are not always easily accessible or even part of the person's conscious awareness. Cognitive appraisal is the process of categorizing an encounter with respect to its significance for well-being (Lazarus and Folkman, 1984). Cognitive appraisal involves evaluation and judgment of all facets of the environment and the characteristics and values of the individual.

Lazarus and Folkman (1984) have categorized and subcategorized the appraisal process. Each appraisal can be considered either primary or secondary. Primary appraisal is the initial evaluation of a situation as harmful or beneficial. Secondary appraisal is concerned with the action that must be taken as a result of the encounter; i.e., an appraisal of available resources.

Primary appraisal is divided into three subcategories: (1) irrelevant, (2) benign-positive, and (3) stressful. The irrelevant category includes events that will not affect the person's well-being. Benign-positive appraisals offer positive outcome(s) to the individual (Lazarus and Folkman, 1984). Stressful appraisals include harm/loss, threat, and challenge.

Harm/loss is present in the individual who has already sustained loss or damage. The loss or damage can be physical or psychological.

Anticipated losses fall into the threat category. A major practical distinction between harm/loss and threat is that threat allows for anticipatory planning or coping. Challenge is the third type of stressful appraisal. A challenge encounter has the potential for gain and growth. Challenge and threat appraisals are similar in that they call for the mobilization of coping skills. The primary difference is that challenge appraisals are characterized by pleasurable emotions such as excitement and focus on gain whereas threat appraisals are dominated by negative emotions. A single situation may be appraised simultaneously as both challenging and threatening by the individual, thus demonstrating that threat appraisals and challenge appraisals may not be mutually exclusive. They must, however, be regarded as separate, but frequently related constructs, rather than as opposite ends of a single continuum (Lazarus and Folkman, 1984).

Primary appraisal of impending weight surveillance would be either irrelevant or benign-positive to an individual who is below his/her maximum allowable weight. However, an individual who is over the allowed weight would appraise the situation as stressful. Stress would be generated if the person had had previous difficulty remaining within the required weight range. Such stress would arise from anticipation of punitive action and loss of self esteem from inability to remain within the required weight range. For the individual who is within reach of attaining the desired weight by the surveillance date, a heightened sense of meeting the challenge may become manifest.

Secondary appraisal is the evaluation of coping resources to determine what can be done to handle the situation. According to Lazarus and Folkman (1984), this is a complex process that takes into account the following factors: available coping options, the likelihood that a given coping option will accomplish the desired result, and the likelihood that the individual can apply a strategy or a set of strategies effectively. It is the individual's primary appraisal of a situation that determines what is at stake. It is the individual's secondary appraisal that determines coping options. The complex interaction of primary and secondary appraisals determines the degree of perceived stress and the emotional reaction of the individual.

Prior to weight surveillance, secondary appraisal may be used by overweight individuals who would consider available coping options, the likelihood that the options will be successful in achieving the desired weight by the weight surveillance date, and the likelihood that they could apply the coping options effectively.

Cognitive appraisal is an evaluation of an interaction between a person and the environment. This interaction may be influenced by characteristics of the person or the environment or both. These characteristics are interdependent due to the nature of the person-environment interaction.

Cognitive appraisal is affected by the individual's commitments and beliefs. The individual's commitments and beliefs: (1) determine what is salient for well-being in a given encounter; (2) shape the person's understanding of the event, and therefore, his or her

emotions and coping efforts; and (3) provide the basis for evaluating outcomes (Lazarus and Folkman, 1984).

Commitments express importance, what has meaning, and what is at stake in an encounter (Lazarus and Folkman, 1984). In the appraisal process, commitments lead the person into challenge and benefit while guiding him away from threat or harm. Strength of commitment is important in terms of vulnerability to stress and determines the amount of effort a person is willing to expend to thwart threats or obstacles to the commitment.

"Beliefs can be described as personally formed or culturally shared cognitive configurations and preexisting notions about reality" (Lazarus and Folkman, 1984, p. 63). Beliefs influence the appraisal process by determining what is fact and how things are in the environment. They are important in determining and shaping understanding of meaning. Beliefs of a primitive order which may be below the level of awareness are not open to question. Higher order beliefs are derived by inductive reasoning gained from experience.

Beliefs concerning personal control stem from Rotter's (1966) reinforcement theory. Personal control is "the extent to which a person assumes he/she can control events and outcomes of importance" (Lazarus and Folkman, 1984, p. 66). Persons who believe in internal locus of control perceive that outcomes result from their own behavior. Persons who believe in an external locus of control perceive that luck, chance, fate, or actions of powerful others control their lives (Rotter, 1966). Belief about locus of control is an important reference point when considering the person-environment

encounter in terms of measures that may be taken to affect the encounter.

Application of this theory to the study demonstrates the importance of beliefs and commitments to the overweight individual in the process of secondary appraisal. The individual's commitment to his occupation and his/her beliefs regarding personal control play a major role in his behavior.

Lazarus and Folkman (1984, p. 141) define coping as "the constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." Two dimensions of coping are problem solving (problem-focused coping) and controlling emotional distress (emotional-focused coping) (Lazarus and Folkman, 1984).

Coping depends on resources available to the individual as well as constraints that prevent the individual from using available resources. Personal resources include health and energy, positive beliefs, problem solving skills, social skills, social support and material resources. Constraints arise from personal agendas and the environment (Lazarus and Folkman, 1984).

Lazarus and Folkman (1984) describe the process of coping as encompassing (1) what the person actually does, (2) what the person thinks about his/her situation, and (3) how the person alters thoughts and actions as the stressful situation develops. This dynamic process is determined by continuous appraisals and reappraisals of the person-environment relationship. This researcher is primarily

concerned with what the person actually does to cope with the stress of mandatory weight surveillance.

CHAPTER III

METHODOLOGY

Introduction

This chapter will present the methodology used with this study. This will be accomplished by first examining the research design, instrumentation, and procedure. The population and sample will be specified and human subjects' concerns will be discussed. The data will be viewed in terms of management and analysis.

Research Design

A descriptive, comparative research design was used for this study. Polit and Hungler (1987) describe descriptive research as that which aims to observe, describe, and document aspects of a situation without determining relationships among variables. This study was preliminary research in an area in which little information is available. The purpose of the study was to describe and document the occurrence of behaviors related to mandatory weight surveillance.

Population and Sample

The target population consisted of all military personnel who participate in mandatory weight surveillance. All military personnel (n = 1,165) assigned to the United States Air Force Medical Center at

a midwestern Air Force Base comprised the potential sample. This sample was representative of the population because all active duty military personnel participate in mandatory weight surveillance. Access to the subjects was gained by obtaining permission from the Commander of the Air Force Medical Center (See Appendix F).

Human subjects' concerns

Permission to conduct the study was obtained through the Ohio State University Human Subjects Review Committee (See Appendix F). Participation in the study was voluntary. Returned questionnaires indicated subject consent. Questionnaires (See Appendix E) were not coded or identified with an individual in any manner. Subjects remained anonymous. There were no anticipated benefits to the subjects although they participated in a study that generated new information about behaviors of persons participating in mandatory weight surveillance. There were no physiological or psychological risks involved with participation in the study.

Instrumentation

An investigator designed, short answer questionnaire was distributed to each active duty Air Force member at the medical center three weeks prior to the semi-annual weight surveillance. The first side of the questionnaire was specific to Air Force military personnel and was developed to gather data regarding demographics, past history with the weight program, and subjects' perception of their weight. Demographic items designed to provide information specific to the

study questions included gender, present weight, and maximum allowable weight. The demographic questionnaire was reviewed by the investigator's thesis committee chair and a physician consultant for clarity of the questions and content validity.

The second side of the questionnaire consisted of a list of 21 potential preparatory weight reduction behaviors that were assembled following the literature review on weight surveillance. This list was reviewed by 12 nurses with expertise regarding weight control and eating disorders. They agreed that the list of potential preparatory weight reduction behaviors was comprehensive. This contributed to the content validity of the instrument. To complete this section, subjects were instructed to circle all behaviors used prior to weight surveillance. A final open-ended question allowed subjects to list any other behaviors practiced prior to weight surveillance.

Because the questionnaire was reproduced on both sides of a single sheet of paper, a statement; "Please turn the paper over and complete the other side."; was placed at the bottom of the first side of the questionnaire. This statement was typed entirely with capital letters and was highlighted in yellow. At the bottom of the second side of the questionnaire, a statement; "Be sure you have completed the other side of this survey."; was included to prevent omission of the demographic section.

Procedure

A questionnaire (Appendix E), letter of explanation (Appendix D), and self-addressed envelope were mailed to each potential subject

through the medical center's distribution system. Potential subjects were instructed to complete both sides of the questionnaire and return it to the researcher in the envelope provided. Subjects were instructed to seal the envelopes and to refrain from signing the questionnaire so that anonymity was assured. A ten day time frame was specified for completion and return of the questionnaires.

Five days after the initial letters and questionnaires were sent to subjects, a follow-up letter and additional questionnaire were mailed to each subject. Purposes of the follow-up letter (Appendix D) were to serve as a reminder to those who had forgotten to complete the questionnaire; provide an additional questionnaire for those who had misplaced it; and to reassure subjects of their anonymity.

Management of Data

Questionnaires were reviewed to determine if they had been completed and were usable. Three questionnaires were not usable; two were completely blank and the third contained responses that were not possible. Questionnaires containing missing responses in the demographics were deemed usable and omissions were recorded as missing values. Coding, which is the translating of data into numerical categories (Polit and Hungler, 1987) was accomplished and the data were entered into the computer.

Analysis of Data

The SPSS computer program was used to analyze the data. Descriptive statistics were used to describe the sample and the

behaviors reported by respondents. Frequencies and percentages were determined for each variable. Means were computed where appropriate. The t-test is a parametric procedure used to test the significance of differences between means or variances (Polit and Hungler, 1987). The t-test was used when comparing two means. The chi-square test is a nonparametric test of statistical significance used to assess whether a relationship exists between two nominal-level variables. This test was used for the majority of cross tabulations between categories. The level of significance for all computations was set at .05.

CHAPTER IV

RESULTS

Introduction

This chapter contains a description of the sample and analysis of data. The description of the sample was compiled from responses to the demographic section of the questionnaire. The data were obtained from subject responses to behaviors listed on the questionnaire. The analysis of data was approached in terms of the three study questions. Specifically, each variable was examined with regard to gender and weight group classification of respondents.

Three weight range group (WRG) designations were established to facilitate discussion of weight. The maximum allowable weight (MAW) was the basis for the classifications. This was deemed appropriate because the sample was comprised of Air Force members who must use MAW as their standard. Groups were specified in terms of 10 percent increments related to the MAW. The 10 percent level was selected because the Air Force describes each individual's desired weight to be "that weight at which the person is the healthiest and should have the best life expectancy; approximately 10 percent or more below the MAW" (AFR 35-11, 1985, p. 5). The three weight groups designated by the investigator were:

WRG 1 - individuals weighing below 10 percent of their MAW;

WRG 2 - individuals weighing within 10 percent of their MAW;

WRG 3 - individuals weighing more than their MAW.

Description of the Sample

The sample consisted of active duty Air Force personnel assigned to a medical center at a midwestern Air Force Base. A total of 1,165 questionnaires was mailed through the medical center's distribution system. Six questionnaires were returned to the investigator due to personnel transfers or retirement. Because medical center distribution policies do not require undeliverable mail to be returned to the sender, it was not possible to determine how many questionnaires actually reached subjects, an important consideration with a mobile group such as Air Force members. Seven hundred and twenty-six questionnaires were returned to the investigator, a response rate of 63 percent.

Four hundred and sixty-one (63.9%) of the respondents were male and 260 (36.1%) were female. Respondents ranged in age from 18 - 57 years. The age range of male subjects was 18 to 57 years and the age range of female subjects was 19 to 51 years. The mean total length of time respondents had been in the Air Force was nine years for males and 5.8 years for females (refer to Table 1).

The majority of the sample (83.3%) was white. Blacks comprised 10.6% of the subjects, Hispanics comprised 2.5% of the sample, and 3.6% of the sample was other ethnic groups (refer to Table 2).

Table 1 - Description of Sample According to Sex, Age, and Years in the Air Force*

	n	Age Range	$\bar{X}$ Age	Range Years in Service	$\bar{X}$ Total Years in Service
Male	461	18-57	31.9	0.25-29	9.0
Female	260	19-51	28.7	0.25-22.50	5.8
Total	721	18-57	30.74	0.25-29	7.89

*Data missing from 2 subjects

Table 2 - Description of Sample by Ethnicity and Sex*

	White	Black	Hispanic	Other
Male	390 (54.5%)	44 (6.1%)	10 (1.4%)	13 (1.8%)
Female	206 (28.8%)	32 (4.5%)	8 (1.1%)	13 (1.8%)
Total	596 (83.3%)	76 (10.6%)	18 (2.5%)	26 (3.6%)

*Data missing from 7 subjects

The mean height for male respondents was 70.1 inches and the mean height for female subjects was 65.1 inches. Male respondents had a mean weight of 176 pounds whereas female respondents had a mean weight of 135.5 pounds (refer to Table 3).

Subjects were asked to indicate the number of times they had been enrolled in the Air Force weight program. The majority of the respondents had never been in the program. Thirty-eight (5.3%) of the respondents had been in the program once. Seven (1%) had been in the program twice; and 13 (1.8%) had been in the program three or more times (refer to Table 4).

Table 3 - Description of Sample by Height, Weight and Sex*

	$\bar{X}$ Height	$\bar{X}$ Weight
Male	70.1"	176.0 lbs.
Female	65.1"	135.5 lbs.
Total	n = 719	n = 713

*Data missing from 10 subjects

Table 4 - Description of Sample by Number of Times in the Air Force Weight Program and Sex*

	0	1	2	3 or more
Male	430 (59.8%)	16 (2.2%)	3 (0.4%)	10 (1.4%)
Female	231 (32.1%)	22 (3.1%)	4 (0.6%)	3 (0.4%)
Total	661 (91.9%)	38 (5.3%)	7 (1.0%)	13 (1.8%)

*Data missing for 4 subjects

The educational background of the majority of respondents was above the high school level. Two hundred and fifteen (29.9%) subjects had "some college" education. Associate degrees were earned by 48 (6.7%) of the respondents whereas 137 (19.1%) of the respondents had obtained bachelor of science or bachelor of arts degrees. Sixty-nine (9.6%) subjects had master of science or master of arts degrees whereas 156 (21.7%) subjects were prepared at the doctoral level. Ninety-four (13.1%) respondents had a high school or equivalent education (refer to Table 5).

Table 5 - Description of Sample by Education and Sex*

	H. S. or Equiv.	Some College	AD	BS,BA	MS, MA	Doctorate
Male	59(8.2%)	148(20.6%)	38(5.3%)	47(6.5%)	35(4.9%)	132(18.4%)
Female	35(4.9%)	67(9.3%)	10(1.4%)	90(12.5%)	34(4.7%)	24(3.3%)
Total	94(13.1%)	215(29.9%)	48(6.7%)	137(19.1%)	69(9.6%)	156(21.7%)

*Data missing from 4 subjects

Respondents were asked to indicate their rank category. The sample was comprised of more officer respondents than noncommissioned officers (NCO) or enlisted respondents. Two hundred and nine (29%) of the respondents were enlisted whereas 179 (24.8%) were NCO and 46.2% were officers (refer to Table 6).

Table 6 - Description of Sample by Rank and Sex*

	Enlisted	NCO	Officer
Male	119 (16.5%)	148 (20.5%)	194 (26.9%)
Female	90 (12.5%)	31 (4.3%)	139 (19.3%)
Total	209 (29%)	179 (24.8%)	333 (46.2%)

*Data missing from 2 subjects

Subjects were asked to indicate if they were pleased with their present weight, not pleased with their present weight, or neutral concerning their present weight. Almost half of the respondents (337 or 46.9%) were not pleased with their present weight. Two hundred and thirty-five subjects (32.7%) were pleased with their present weight

whereas 147 (20.4%) subjects were neutral concerning their present weight (refer to Table 7).

Table 7 - Description of Sample by Perception of Weight and Sex*

	Pleased	Not Pleased	Neutral
Male	166 (23.1%)	199 (27.7%)	94 (13.1%)
Female	69 (9.6%)	138 (19.2%)	53 (7.4%)
Total	235 (32.7%)	337 (46.9%)	147 (20.4%)

*Data missing from 4 subjects

Analysis of Data

The questionnaire contained a list of 21 behaviors that people might engage in prior to mandatory weight surveillance. Subjects were asked to circle all behaviors that applied to them during the four weeks prior to the scheduled weigh-in. Following the list, an open ended question asked subjects to list other actions taken to decrease their weight before the weigh-in. These data will be reported in terms of the study questions.

Study Question 1:

During the four weeks prior to mandatory weight surveillance, what behaviors are used by persons who must be within a specified weight range by the time of the mandatory weigh-in?

Subjects' responses revealed that each behavior was practiced with the exception of behavior 15, "I take prescription laxatives." The range of behaviors practiced was 1 - 11 behaviors. The number of behaviors most frequently practiced (mode) was 1 behavior; however,

the mean number of behaviors practiced by respondents was 1.9 behaviors (see Table 8).

Table 8 - Number of Preparatory Behaviors According to Sample

Behavior	Frequency	%
1. Nothing different.	484	67.1%
2. Skip meals periodically.	131	18.2%
3. Fast the day before the weigh-in.	58	8.0%
4. Cut down - desserts and/or snacks.	183	25.4%
5. Special, well balanced diet.	61	8.5%
6. Exercise - more frequently or more intensely.	133	18.4%
7. Take over-the-counter diet pills.	23	3.2%
8. Take prescription diet pills.	3	0.4%
9. Eat large amounts of food at times.	48	6.7%
10. Smoke more to decrease appetite.	17	2.4%
11. Take over-the-counter water pills.	16	2.2%
12. Take prescription water pills.	17	2.4%
13. Rubber suit while exercising.	8	1.1%
14. Take over-the-counter laxatives.	19	2.6%
15. Take prescription laxatives.	0	0
16. Use a sauna or steam bath.	39	5.4%
17. Drink more coffee or tea.	43	6.^%
18. Skip two meals a day.	36	5.0%
19. Take syrup of ipecac.	1	0.1%
20. Skip one meal a day.	47	6.5%
21. Make myself vomit.	1	0.1%

In response to the open ended question concerning other actions taken to decrease weight before the weigh-in (Question 22) respondents specified increasing or decreasing water intake, limiting salt intake, cessation of alcohol consumption, utilization of physician supervised liquid diets, and enrollment at health resorts (Table 9). Subjects also listed various levels of frequency or intensity related to the listed behaviors. For example one respondent circled Behavior 3 ("Fast the day before the weigh-in") and replied to Question 22 by writing, "I fast as long as it takes."

Study Question 2:

During the four week time period prior to mandatory weight surveillance, how does the behavior of overweight individuals compare to the behavior of individuals meeting weight standards?

A comparison of the behaviors used by respondents' weight range groups (WRG) showed that utilization of each behavior increased as the percentage of weight related to the maximum allowable weight (MAW) increased. The mean number of behaviors practiced by WRG 3 was highest (4.20 behaviors), exceeding the sum of the means of WRG 1 and WRG 2. The mean number of behaviors used by WRG 1 members was 1.22 behaviors whereas the mean number of behaviors used by WRG 2 members was 1.94 behaviors. With the exception of behaviors 8 ("I take prescription diet pills"), 19 ("I take syrup of ipecac"), and 21 ("I make myself vomit"), chi-square analysis showed that the difference between WRG and individual behaviors was statistically significant. Because Behavior 15 ("I take prescription laxatives") was not

practiced it was not analyzed. Table 10 shows the number of preparatory behaviors according to weight range groups and the values of the chi-square analyses.

Table 9 - Comments and Additional Preparatory Behaviors Practiced by Respondents

Behavior/Comment	Frequency
1. Eat less fattening foods	1
2. Decrease food portions	7
3. Decrease fats, starches, commercial sugars	1
4. Avoid empty calorie foods	1
5. Avoid fried foods	1
6. Avoid eating in restaurants	1
7. Eat only vegetables	1
8. Eat only soup and salad	1
9. Eat only fruit before noon for 2 weeks	1
10. Eat only vegetables and low fat cottage cheese	1
11. Drink distilled water and gatoraid	1
12. Increase water intake	5
13. Decrease fluid intake	3
14. Decrease salt intake	4
15. Follow Weight Watchers diet	1
16. Follow Richard Simmons Deal-a-Meal Diet	1
17. Eat less than 1,000 calories for a month before the weigh-in	1
18. Physician supervised liquid diet	2
19. Crash diet	3

Table 9 continued

Behavior/Comment	Frequency
20. Fast for 1 or 2 weeks	1
21. Fast as long as it takes	1
22. Starve for 1 or 2 weeks until near death. January weigh-in is the worst due to holidays. Starve/ dehydrate is widely used	1
23. Fast for up to 2 weeks while exercising, running, and sitting in the sauna	1
24. Fast for several days at a time. Exercise daily. Stop fluids for several days. Double up on diuretics. Take laxatives occasionally	1
25. Enroll at health resort	1
26. Lift weights - work-out	5
27. Sleep less	1
28. Decrease alcohol intake	1
29. Consider skipping meals and making myself vomit	1
30. Has a problem with weight in the winter	1
31. Weigh-in after 3 major holidays is difficult	3
32. Keep body fat down to get a waiver if weight is too high	1
33. Don't get fat in the first place	1
34. Pregnant	3
35. Postpartum less than 3 months	2
36. Chronic overeater for years. Don't eat as long as it takes to reduce. Never above MAW at weigh-in Need help but haven't asked	1
37. Highly stressed. Engage in compulsive, depressive eating.	1
38. Would like to gain weight	8

Table 10 - Comparison of Preparatory Behaviors According to Weight Range Group (WRG)[a] and Chi-square Analysis

Preparatory Behavior	WRG 1 No.	%	WRG 2 No.	%	WRG 3 No.	%	X^2	df	p
1. Nothing different.	302	(42.3%)	164	(23%)	14	(15.2%)	206.09	2	.00
2. Skip meals periodically.	24	(7.2%)	57	(19.9%)	48	(52.2%)	99.82	2	.00
3. Fast the day before the weigh-in.	2	(0.6%)	19	(6.6%)	37	(40.2%)	153.26	2	.00
4. Cut down - desserts and/or snacks.	22	(6.6%)	95	(33.1%)	64	(69.6%)	166.61	2	.00
5. Special, well balanced diet.	7	(2.1%)	36	(12.5%)	16	(17.4%)	33.89	2	.00
6. Exercise - more frequently or more intensely.	9	(2.7%)	68	(23.7%)	55	(59.8%)	164.77	2	.00
7. Take over-the-counter diet pills.	1	(0.3%)	7	(2.4%)	15	(16.3%)	60.26	2	.00
8. Take prescription diet pills.	1	(0.3%)	1	(0.3%)	1	(1.1%)	1.13	2	.57
9. Eat large amounts of food at times.	16	(4.8%)	20	(7.0%)	12	(13.0%)	7.91	2	.02
10. Smoke more to decrease appetite.	4	(1.2%)	6	(2.1%)	6	(6.5%)	9.40	2	.01
11. Take over-the-counter water pills.	1	(0.3%)	5	(1.7%)	10	(10.9%)	37.36	2	.00
12. Take prescription water pills.	0		7	(2.4%)	11	(12.0%)	42.00	2	.00
13. Wear rubber suit while exercising.	0		2	(0.7%)	6	(6.5%)	28.49	2	.00
14. Take over-the-counter laxatives.	1	(0.3%)	6	(2.1%)	12	(13.0%)	48.87	2	.00
15. Take prescription laxatives.	0		0		0		b		
16. Use a sauna or steam bath.	4	(1.2%)	14	(4.9%)	20	(21.7%)	60.65	2	.00
17. Drink more coffee or tea.	5	(1.5%)	17	(5.9%)	19	(20.7%)	48.98	2	.00
18. Skip two meals a day.	4	(1.2%)	12	(4.2%)	19	(20.7%)	59.16	2	.00
19. Take syrup of ipecac.	0		1	(0.3%)	0		1.49	2	.47
20. Skip one meal a day.	6	(1.8%)	19	(6.6%)	21	(22.8%)	53.01	2	.00
21. Make myself vomit.	0		1	(0.3%)	0		1.49	2	.47
N	335		287		92				
# of behaviors	409		557		386				
$\bar{X}$ # of behaviors	1.22		1.94		4.20				

a WRG 1 = <10% of maximum allowable weight (MAW)
WRG 2 = within 10% of MAW
WRG 3 = >MAW

b Unable to compute due to lack of data

Study Question 3:

During the four week time period prior to mandatory weight surveillance, how do the preparatory behaviors of men and women participating in mandatory weight surveillance compare?

The preparatory behaviors of men and women were examined in terms of frequency of occurrence and differences between groups. A total of 461 male respondents indicated that they collectively engaged in 851 preparatory behaviors ($\bar{X} = 1.85$). A total of 260 female respondents indicated that they collectively engaged in 517 preparatory behaviors ($\bar{X} = 1.99$). Each of the 21 behaviors was then considered separately in terms of differences in response according to gender. Behavior 15 was not practiced by either male or female respondents. Of the remaining behaviors analyzed, Chi-square analyses showed differences in utilization of the preparatory behaviors between males and females to be statistically significant for only 3 behaviors. These behaviors were: (a) "I do nothing different;" (b) "I cut down on desserts or snacks;" and (c) "I take over-the-counter water pills" (Table 11).

Table 11 - Number of Preparatory Behaviors According to Sex, Chi-Square Analysis

Preparatory Behaviors	Male No. %	Female No. %	X^2	df	p
1. Nothing different.	328(71.1%)	156(60.0%)	8.87	1	.0029
2. Skip meals periodically.	74(16.1%)	57(21.9%)	3.47	1	.0625
3. Fast the day before the weigh-in.	40 (8.7%)	18 (6.9%)	.47	1	.4910
4. Cut down - desserts and/or snacks.	103(22.3%)	80(30.8%)	5.80	1	.0161
5. Special, well balanced diet.	36 (7.8%)	25 (9.6%)	.49	1	.4855
6. Exercise - more frequently or more intensely.	83(18.0%)	50(19.2%)	.09	1	.7583
7. Take over-the-counter diet pills.	11 (2.4%)	12 (4.6%)	2.00	1	.1571
8. Take prescription diet pills.	1 (0.2%)	2 (0.8%)	.25	1	.6144
9. Eat large amounts of food at times.	29 (6.3%)	19 (7.3%)	.14	1	.7110
10. Smoke more to decrease appetite.	10 (2.2%)	7 (2.7%)	.04	1	.8501
11. Take over-the-counter water pills.	4 (0.9%)	12 (4.6%)	9.10	1	.0026
12. Take prescription water pills.	8 (1.7%)	9 (3.5%)	1.47	1	.2258
13. Rubber suit while exercising.	8 (1.7%)	0	3.12	1	.0774
14. Take over-the-counter laxatives.	8 (1.7%)	11 (4.2%)	3.12	1	.0773
15. Take prescription laxatives.	0	0	*		
16. Use a sauna or steam bath.	27 (5.9%)	12 (4.6%)	.29	1	.5918
17. Drink more coffee or tea.	29 (6.3%)	14 (5.4%)	.11	1	.7417
18. Skip two meals a day.	19 (4.1%)	17 (6.5%)	1.57	1	.2103
19. Take syrup of ipecac.	1 (0.2%)	0	.00	1	1.00
20. Skip one meal a day.	31 (6.7%)	16 (6.2%)	.02	1	.89
21. Make myself vomit.	1 (0.2%)	0	.00	1	1.00
Total number of respondents	461	260			
$\bar{X}$ Number of Preparatory Behaviors per Subject	1.85	1.99			

a Unable to Compute Due to Lack of Data

* Significant at <.05

CHAPTER V

DISCUSSION OF FINDINGS

Introduction

The purpose of this chapter is to discuss the study results. Results will be compared with findings of previous studies and applied to the theoretical framework. Limitations and strengths of the research will be presented. Recommendations in terms of further research and action will be made. Nursing implications will be specified.

Discussion

According to the data, all but one of the weight reduction preparatory behaviors identified by the literature review were used by Air Force members assigned to a midwestern medical center. Respondents also identified behaviors that they used to decrease weight prior to the weigh-in that were not among the 21 behaviors provided on the questionnaire. Although the majority of the 723 subjects (67%) responded that they didn't do anything different during the four weeks prior to mandatory weight surveillance, some respondents used as many as 11 preparatory behaviors prior to the weigh-in.

Demographic characteristics of the survey sample limit the generalizability of the study results. When compared with the target population, the survey sample was comprised of less minorities, was more highly educated, and contained a greater number of officers in relation to enlisted or non-commissioned officers. These characteristics are most likely a function of the employment place. The medical center has a large number of health care professionals who have a higher education level and rank as compared with nonprofessionals.

The number of preparatory behaviors used prior to weight surveillance differed when three weight groups were compared. The group who weighed the lowest in terms of percentage of weight from the maximum allowable weight used the fewest number of preparatory behaviors. Utilization of these preparatory behaviors increased for the next group who weighed within 10% of their maximum allowable weight. Individuals who exceeded the maximum allowable weight used the most preparatory behaviors prior to weight surveillance. Differences between weight range groups and 17 out of 20 preparatory behaviors were statistically significant according to Chi-square analysis (refer to Table 10).

The use of preparatory behaviors by men and women during the four weeks prior to mandatory weight surveillance did not differ significantly except for three items. Male respondents used a mean number of 1.85 behaviors and female respondents used a mean number of 1.99 behaviors.

Comparison of Findings with Previous Studies

Almost all of the weight reduction preparatory behaviors used prior to mandatory weight surveillance that were identified in the literature review were used by the respondents of this study. Respondents used behaviors that seriously compromised adequate nutrition. Similarly, the use of diets deficient in calories, nutrients, and vitamins was reported by Delta flight attendants (Personal interview, Delta Airlines Flight Attendants, 1988) and studies by Evers (1987), Maloney (1983), and Steen and McKinney (1986).

The use of saunas, laxatives, and diuretics in conjunction with decreased intakes of food and fluids and increased exercise was cited in the studies of Humphries and Gruber (1986), King and Mezey (1987), and Steen and McKinney (1986). Each of the behaviors mentioned above was practiced by some of the study respondents. Self-induced vomiting, a preparatory behavior used by one military respondent, was identified as a weight reduction technique of subjects studied by Costar (1983), Steen and McKinney (1986), and King and Mezey (1987). The use of syrup of ipecac, a preparatory behavior included in the study instrument and practiced by one respondent, was not identified within the literature review. Similar to the findings of Humphries and Gruber (1986) and King and Mezey (1987), study respondents (n = 26) reported taking appetite suppressants (see Table 8).

Exercising in a hot environment or while wearing a rubber or plastic suit was identified as a weight reduction method by subjects studied by Tipton and Tcheng (1970) and Steen and McKinney (1986).

Military respondents (n = 8) exercised while wearing a rubber suit but they did not exercise in a hot environment. (Exercising in a hot environment was not a preparatory behavior listed on the study instrument.) Subjects participating in the studies of King and Mezey (1987) and Humphries and Gruber (1986) engaged in binge eating. While this behavior was not specifically measured per se by the present study, 48 respondents "ate large amounts of food at times."

Weight reduction preparatory behaviors which were not found in the review of literature but were identified by study respondents included avoiding certain types of foods and avoiding the use of salt and alcohol. Respondents also identified specific diets used such as Weight Watchers, Richard Simmons' Deal-A-Meal, and physician supervised liquid diets. As mentioned previously, some of the subjects discussed in the review of literature reported decreasing their fluid intake. Some of the study respondents, however, reported decreasing their fluid intake while other respondents specifically reported increasing their water intake.

Application of the Theoretical Framework to the Study

The stress, appraisal, and coping theory of Lazarus and Folkman (1984) was used as the theoretical framework for this study. According to Lazarus and Folkman (1984) psychological stress occurs when an individual perceives the relationship between himself and the environment as taxing, exceeding his resources, or threatening his well-being. For some individuals mandatory weight surveillance may be a phenomenon that contributes to psychological stress.

Cognitive appraisal is the process of categorizing an encounter with respect to its significance for well-being (Lazarus and Folkman, 1984). Two types of appraisal are primary and secondary. The person anticipating mandatory weight surveillance would initially use primary appraisal to evaluate the situation as harmful or beneficial. The individual who is well below his maximum allowable weight would most likely appraise the situation as beneficial. Subcategories "neutral" or "benign-positive" might further describe the evaluation of the situation.

An individual who exceeds or is near his maximum allowable weight would probably appraise his situation as stressful. Types of stress appraisal include harm/loss, threat, and challenge. The person who exceeds his MAW at the time of weight surveillance may perceive this surveillance as a harm/loss, threat, or challenge situation.

Secondary appraisal is concerned with actions that must be taken as a result of the phenomenon that is causing the stressful situation. This action depends on the appraisal of the situation. Harm/loss implies negative outcome and is present in the individual who has already sustained loss or damage. Such an individual might be one who has a prior history of weight program involvement. This person, if overweight at the time of mandatory weight surveillance, may anticipate a negative outcome. If the individual determines that achieving the standard is possible by the time of the weight surveillance, he can use anticipatory planning or coping strategies. These coping actions might be regarded as challenging if the individual thinks a positive outcome is possible.

When an individual uses secondary appraisal to determine which coping resources are available for weight reduction, he must consider whether the coping options are available, the likelihood that the options will accomplish the desired result, and the likelihood that he can employ the strategies effectively. Commitments and beliefs influence the individual's selection of coping behaviors. Commitments express what is important or at stake (Lazarus and Folkman, 1984). The person preparing for weight surveillance must assess the importance of meeting the standard as well as his commitment to the Air Force. He must recognize what is at stake if he does not meet the standard. Beliefs are personally formed notions about reality (Lazarus and Folkman, 1984). The belief associated with internal or external locus of control is important when considering the person preparing for weight surveillance. An individual who believes that outcomes result from his own behavior would be more likely to employ coping behaviors aimed at meeting standards.

Because the instrument used in this study did not collect data concerning beliefs and commitments of subjects, it is not possible to draw conclusions regarding motivation for use of coping behaviors.

Limitations of the Study

Nonrepresentativeness of the sample was discussed previously. Because sample characteristics are specific to Air Force medical center personnel, the results of this study are only generalizable to military personnel assigned to large health care facilities. Another factor that may have influenced the study results is the availability

of prescription drugs within the health care environment. It is also feasible that health care providers may behave differently than nonhealth care providers concerning health care issues such as weight control.

Weight surveillance is a very controversial issue in the armed forces, one that is linked with high stakes such as loss of one's job and retirement benefits. Because of this factor, the realization that subjects may not have responded to the questionnaire honestly must be considered. The question must be asked, "Did the 37% of the sample who chose not to answer the questionnaire decide not to do so because of reasons such as lack of interest or lack of time, or because they were afraid to respond?" Nonrespondents may not be similar to respondents.

Strengths of the Study

Because this research is the first study of preparatory behaviors of military personnel prior to mandatory weight surveillance new knowledge was generated. The sample was large (n = 1,165) and the response rate (63%) was better than average for survey research (Polit and Hungler (1987).

Recommendations and Conclusion

The implications raised by this study are grave. Forty-seven percent (n = 337) of the subjects surveyed were not pleased with their present weight. Eight percent (n = 58) of those surveyed had been on the Air Force weight program at least once. All but one of the weight

loss behaviors identified by the review of literature had been used by respondents. The mere scope of respondent involvement with mandatory weight surveillance as well as the extreme nature of some of the preparatory behaviors that were used indicates a strong need for further research in this area.

Recommendations for further study are numerous. Replication of this study should be conducted within the Air Force nonhealth career field as well as within other branches of the armed forces. Employees of nonmilitary occupations who participate in weight surveillance should also be studied; i.e., airline employees.

Behaviors routinely used to maintain weight should be solicited from respondents. Information concerning the efforts of underweight individuals to attain or maintain weight should be procured.

Additional information should be collected to determine characteristics of respondents that might influence utilization of preparatory behaviors. For example, is there a relationship between number of times on the Air Force weight program or length of time in the service with the number of preparatory behaviors practiced prior to mandatory weight surveillance? Other questions follow: Is there a relationship between education level and utilization of preparatory behaviors? Do individuals enrolled in the Air Force weight program have a higher incidence of morbidity or mortality when compared with individuals not in the program? Is there a higher incidence of morbidity and mortality among Air Force personnel during a time period associated with the mandatory weight surveillance?

There are differing degrees of unhealthiness among the 21 preparatory behaviors considered in this study. For example, "I make myself vomit" is more unhealthy than "I cut down on desserts or snacks." Classification of these behaviors on a continuum based on the unhealthiness of the behavior would allow comparisons between unhealthy behaviors and characteristics of individuals who engage in those behaviors.

The question of underlying issues that may be central to weight control should be raised. The data collection instrument should be modified to obtain information regarding personal beliefs and commitments of respondents regarding weight control. This information could further validate Lazarus and Folkman's (1984) stress, appraisal, and coping theory as well as its utilization in weight control explanation.

The literature has shown that individuals engaged in sports requiring mandatory weight surveillance are at risk for eating disorders (Fairbanks, 1987). The data from this study have shown that 47% of the respondents were not pleased with their present weight. Recommendations for action include altering the philosophy and practice of the Air Force weight management program. A positive, health oriented focus would be more beneficial for this group of individuals rather than the current punitive approach which includes the denial of promotion, continuing education, reassignment, and retirement to individuals who do not meet weight standards. The number of people who have been on the weight program at least once (8.1%) is substantial and many of the behaviors that were identified

are unhealthy. The most important implication for nurses is to recognize the scope and degree of this potential health problem. Nurses who work in this field can help their clients to recognize unhealthy behaviors and to replace these behaviors with healthy alternatives.

APPENDIX A

SELECTED PORTIONS OF

AIR FORCE REGULATION 35-11

(This is a verbatim text of pages

5, 6, 8, 13-20, 31-33, 44, 45.)

Chapter 1

GENERAL INFORMATION

1-1. General Information. Department of Defense (DOD) Directive 1308.1, 29 June 1981, requires each military service to provide a weight management and physical fitness program. The weight and fitness programs are tailored to meet DOD objectives and the specific needs of the Air Force. Weight management and physical fitness are linked to self-image and self-esteem and promote an overall healthy lifestyle for all Air Force members while improving military appearance and performance. Air Force members are responsible for achieving and maintaining the standards of weight and physical fitness defined in this regulation.

1-2. Terms Explained:

a. Aerobic Activity. An endurance exercise which lasts continuously over a period of time (minimum 20 minutes) and enhances the ability of the body to move air into and out of the lungs. Includes activities such as running, walking, cycling, rope skipping, swimming.

b. Body Fat. The percent of body fat tissue versus total body weight (body muscle and bone, water and fat).

c. Body Fat Measure (BFM) Adjustment. An upward or downward adjustment to a member's maximum allowable weight standard based on determination of an individual's percentage of body fat. Compliance with body fat standards will be determined by circumference measurement procedures as outlined in attachment 4 and AFR 160-17. Personnel Data System (PDS) code 4.

d. Clinical Obesity. A subjective decision by the medical practitioner that the member appears obese and there is no underlying medical condition that causes obesity (AFR 160-17) or prevents weight loss by dieting.

e. Fitness Evaluation. At least an annual event consisting of the 1.5-mile run or 3-mile walk.

• f. Fitness Improvement Training (FIT) Program. A rehabilitative program that includes an exercise regimen for members who are not prepared for or who do not successfully complete their fitness evaluation. Placement in this program for a minimum of 90 days is mandatory. Extension beyond 90 days is at the unit commander's discretion. The exercise regimen will be performed during off-duty time unless the commander directs or allows the use of on-duty time as mission requirements permit. Use of the Starter Fitness Program at attachment 16 is encouraged.

g. Desired Body Weight. The weight at which a person is the healthiest and should have the best life expectancy. Desired weight is approximately 10 percent or more below the maximum allowable weight.

h. Maximum Allowable Weight (MAW). An individual's maximum allowable weight as required by Air Force weight tables (attachments 2 or 3) or as adjusted based on an approved body fat measurement or weight waiver.

i. MAW Standard Adjustment. An adjustment to the MAW standard. May be either an approved BFM or weight waiver.

j. Medical Practitioner. A physician, or a physician assistant (PA), nurse or nurse practitioner (NP) working under a physician's supervision, who is authorized to certify the individual's weight condition is controllable, the body fat measurement was properly administered, and provides a determination of clinical obesity. May recommend entry into a safe exercise program.

k. Monthly. Calendar month, or period of time from any day of the month to the corresponding day of the next month. Periods of approximately 30 days.

l. Observation Period (Weight Management Program (WMP) Phase II). Phase II indicates the member has met his or her MAW. During this 6-month period, the member continues monthly weight checks and diet counselings to reinforce a healthy lifestyle. PDS code 3.

m. Overfat. A condition characterized most accurately by the excess body fat or more roughly by body weight exceeding the MAW according to Air Force standards of weight. As used in this directive, overfat refers to the condition which exists when the body fat exceeds 20 percent for men, age 29 years and under; 24 percent for men, 30 years and over; 26 percent for women, age 29 years and under; 30 percent for women, 30 years and over.

n. Overweight Individual. An individual whose weight exceeds the MAW tables or an approved BFM or weight waiver adjustment.

o. Physical Fitness. The ability to rapidly transform stored energy into work. The ability to do daily tasks efficiently, without undue fatigue, and have ample energy remaining for military contingencies, emergencies, and leisure time pursuits.

p. Physical Profile Serial Report (AF Form 422). According to AFR 160-43, Medical Examination and Medical Standards, an AF Form 422 is used for communicating information from a medical facility to personnel, command, and training authorities. Describes the examinee's condition in nontechnical terms, and is used for noting duty restrictions and assignment limitations.

q. Personnel Data System (PDS). A computer system to vertically flow and update personnel information from the base personnel file to Headquarters Air Force personnel file.

r. Probation Period. A 1-year period of time following removal from the WMP. Commanders and supervisors maintain documentation on individuals who successfully complete the WMP. Documentation indicates previous WMP participation and is maintained for 1 year from the date the member is removed from WMP. PDS code 7.

s. Satisfactory Progress. Weight loss of at least 3 pounds each month for women and 5 pounds each month for men. PDS code 1.

t. Temporary Medical Deferral. A temporary deferral from a fitness evaluation, FIT, WMP, or 90-day exercise program for documented medical reasons. Recommended by a medical practitioner and approved or disapproved by the unit commander. Approved or revalidated by the unit commander in increments not to exceed 6 months. PDS code 5 for WMP deferral only.

u. Unit Fitness Program Manager. An individual selected by the unit commander to assist and advise the unit commander regarding the unit fitness program responsibilities.

v. Unit Weight Program Manager. An individual selected by the unit commander to assist and advise the unit commander regarding weight program responsibilities.

w. Unsatisfactory Progress. Failure to lose 3 pounds each month for women and 5 pounds each month for men while in Phase I, or a weight gain over an individual's MAW at any time during Phase II or while in the probation period. PDS code 2.

x. Weight Management Program (WMP). A rehabilitation program designed to assist overweight individuals in obtaining satisfactory weight loss in order to meet Air Force standards. While in the WMP, members will weigh monthly, receive recurring diet counselings, and a 90-day exercise program to complement their weight loss program.

y. Weight Program. A program for all Air Force members that establishes Air Force standards of weight and provides a rehabilitation program for those who are not within standards.

z. Weight Waiver Adjustment. An upward adjustment to a member's MAW approved by the unit commander. Medical practitioner determines member is not clinically obese; base commander determines member presents a professional military appearance; and base commander approves or disapproves. PDS code 4.

***aa. 90-day Exercise Program.** An individual exercise program for members in the WMP. Completion of initial 90-day period is required regardless of the member's duration in Phase I, or if directly entered into Phase II, of the WMP. Continuation beyond the initial 90-day exercise program is annotated on AF Form 1975, Personal Fitness Progress Chart. The exercise program will be performed during off-duty time unless the commander directs or allows the use of on-duty time. Use of the Starter Fitness Program at attachment 16 is encouraged.

1-3. Privacy Act. Requirements of the Privacy Act of 1974 (Public Law 93-579, 5 U.S.C. 552a and AFR 12-35, Air Force Privacy Act Program). The Privacy Act of 1974 requires each federal agency inform individuals from whom it asks personal information, of the authority for soliciting that information; whether its disclosure is mandatory or voluntary; its principal purposes; its routine uses; and its effects on the individual, if any, of not providing it (AFR 12-35).

a. The Privacy Act Statement (PAS) is the principal notice to persons who are asked, or who volunteer to furnish personal information about themselves during interviews, or counseling, about their weight or physical condition. Signs should be displayed in areas where the same information frequently is required to be provided. Printed copies of the PAS must be available and given to the individual when requested. At a minimum the interviewer should verbally summarize the PAS information before the interview commences.

b. Lists or photographs of individuals, their weight, and other personal data will not be posted on bulletin boards or displayed in any manner that might cause embarrassment to the individual or others. Weight information must be adequately safeguarded under the Privacy Act of 1974 and AFR 12-35 to prevent unwarranted invasions of personal privacy, unintentional misuse, or unauthorized disclosure.

c. AF Form 678 Privacy Act Statement - Special Physical Conditioning and Weight Management Programs, is no longer available or required. AF

Chapter 2

AIR FORCE WEIGHT PROGRAM

Section A—The Weight Program

2-1. Introduction. The American public and its elected representatives draw certain conclusions on military effectiveness based on the appearance presented by Air Force members. There must be no doubt Air Force members live by a common standard and are responsive to military order and discipline. Obesity detracts from military appearance and weight management is linked to self-image and self-esteem. The goals of the Air Force Weight Program include encouraging an overall healthy lifestyle and improving military appearance and personal readiness.

2-2. The Weight Program:

a. Weight management is an individual responsibility and applies to all Air Force members. Reaching and maintaining a desired body weight is medically advised. Weight reduction normally reduces high blood pressure, improves blood sugar utilization and often decreases excessive blood fats associated with coronary artery disease. Military members must have the physical and mental stamina to deal with the stress of military life while functioning at peak efficiency. Poor weight management can negatively affect flexibility, mobility, and endurance, and thereby impact Air Force readiness; therefore, weight management is a vital part of our peacetime preparation for combat readiness. All Air Force members must be prepared for worldwide military operations and contingencies. The Air Force Weight Program objectives are to:

(1) Establish a uniform system for weight management for Air Force people.

(2) Provide standards which enhance the attainment and retention of good health and physical fitness.

(3) Enhance the overall appearance and effectiveness of the military organization.

b. The WMP is a rehabilitative program for members who are not within the weight standards defined by this regulation. The objectives of the rehabilitation program are to:

(1) Provide rehabilitative counseling using available base resources and facilities;

(2) Encourage safe weight loss and development of a healthy lifestyle;

(3) Provide commanders a tool to evaluate a member's progress on a monthly basis; and

(4) Provide commanders options concerning administrative action for WMP participants.

c. Weight management is a continuing process that requires a healthy lifestyle to promote productivity and efficiency. Each Air Force member is responsible for developing and maintaining a lifestyle that includes a properly balanced diet and an effective physical conditioning program. Such a lifestyle will support our profession and the objectives of this regulation. The success of this program requires the personal effort from each Air Force member and the support from commanders and supervisors at all echelons.

Section B—Responsibilities

2-3. Major Command (MAJCOM), Separate Operating Agency (SOA), and Direct Reporting Unit (DRU) Responsibilities. Commanders must be aware of program goals and objectives and ensure members under their command comply with Air Force standards of weight. Commanders must make every effort to ensure that the Weight Program is equitably enforced throughout their command and procedures are applied within the spirit and intent of this regulation. The Deputy Chief of Staff for Manpower and Personnel (DCS/MP) or The Deputy Chief of Staff for Personnel (DCS/P) is responsible for monitoring the command program.

2-4. Air Reserve Forces Responsibilities:

a. Air National Guard (ANG). ANG units will comply with the overall spirit and intent of this regulation. All ANG members must comply with Air Force standards of weight. An ANG supplement to this regulation provides additional information unique to the ANG mission, units and personnel. Active duty bases that provide service and support, or both, to members of ANG should acquire a copy of ANG supplement through their local publishing distribution office (PDO). All ANG personnel will be weighed at least annually; however, unit commanders may require additional weight checks as necessary. Members who exceed weight standards and have not been granted a BFM or weight waiver adjustment will be entered into the WMP as required by this regulation. Appropriate administrative action as outlined in the ANG supplement will be taken for ANG members who do not progress satisfactorily. Unit commanders,

commander may determine that appointment of a unit manager is not necessary. In this case, the commander will personally manage the unit's weight program.

c. Organize individual and unit sports and recreational activities.

d. Encourage active participation in self-conditioning programs and proper diet regimen.

e. Take appropriate administrative actions when members fail to meet or maintain standards.

f. Notify CBPO/DPMQA, the individual, and supervisor in writing of entry, removal of individuals from the WMP, or change in status (attachments 6, 9 or 15).

g. Monitor individual progress while in the WMP.

h. Review the Weight Management Program Case File (WMPCF) before transmitting the file to gaining unit commander when the member is transferring PCS or permanent change of assignment (PCA), according to AFR 36-20, Officer Assignments, or AFR 39-11, Airman Assignments. The case file review is documented in section II, of AF Form 393, Individual Record for Weight Management and Fitness Improvement Training (FIT) Programs.

i. Ensure the WMPCF is mailed to the gaining unit commander no earlier than 45 days and no later than 30 days prior to projected departure date (PDD) when the member is transferring PCS or PCA according to AFRs 36-20 or 39-11.

2-11. Unit Weight Program Manager Responsibilities. The unit weight program manager will be selected and appointed by the unit commander. Unit commanders are encouraged to appoint an individual who presents a professional military appearance and has the motivation and enthusiasm necessary to develop and carry out the responsibilities of an effective unit weight program. The unit weight program manager:

a. Conducts weight checks and height measurements of all assigned or attached personnel and reports results to the unit commander (see attachments 1, 2, and 3 for procedures and standards).

b. Makes initial individual medical evaluation appointments and ensures quarterly follow-up diet counseling appointments are scheduled.

c. Reports by unit commander letter, WMP monthly listing discrepancies to CBPO/DPMQA.

d. Performs random weight checks as directed by the unit commander.

e. Periodically publicizes the weight program goals and objectives, and information on the WMP.

f. At the direction of the unit commander, enrolls individuals who do not meet the Air Force standards of weight in the exercise program.

g. Reviews AF Form 379, Individual Physical Fitness and Weight Evaluation Record, prior to PCS or PCA to ensure accuracy and completion.

2-12. Supervisor Responsibilities. Air Force supervisors should be role models for subordinates and are responsible for supporting the unit commander's weight program. They should be physically fit and within weight standards. They must be aware that noncompliance with Air Force standards of weight renders subordinates ineligible for reassignment (if making unsatisfactory progress), voluntary retraining, reenlistment, professional military education (PME) attendance, and affects promotion, and other career opportunities. Supervisors must make every effort to ensure subordinates are in compliance with weight standards at all times, and the unit commander is notified when an individual is not within standards. When a subordinate is in the WMP, supervisors must provide positive counseling, motivation, and follow-up. Supervisors should encourage subordinates to benefit from diet counselings and exercise programs prescribed with the WMP.

***2-13. Individual Responsibilities.** Individuals are responsible for keeping their weight within the established Air Force standards of weight, maintaining a safe and proper diet regimen and participating in a year-round conditioning program that complements the weight program goals and objectives. Members in the WMP receive medical evaluation, diet counselings, participate in a 90-day exercise program, meet the monthly weight loss standard, and make every effort to be within the appropriate Air Force standard of weight by the date established by the unit commander. Establishment of a retirement date does not relieve the member of the responsibility to meet mission requirements, nor does a retirement date justify relaxing Air Force standards. Just as importantly, a member's retirement date does not relieve commanders or supervisors of the responsibility of enforcing standards or of offering quality rehabilitative support. The member's health, well-being, and personal readiness are important throughout military service and into retirement since members remain subject to recall for national emergencies.

2-14. Geographically Separated Units (GSU) Responsibilities. Personnel who are assigned to GSUs, sites, or unique and external activities (for example: Air Force Elements (AFELM), recruiting stations, or communication sites) are required to be within Air Force standards of weight. Because of limited facilities, equipment, or due to geographic locations and conditions, a number of situations are possible that could prevent assigned personnel from completing all aspects of the Air Force Weight Program. For these reasons, the GSU site commander may delay or waive program requirements. GSU commander should advise the host base commander in these instances. Any delay or waiver approval must be documented on AF Form 379 or AF Form 393, or both, by the GSU commander. Every effort must be made to ensure individuals receive the maximum rehabilitative support while in the WMP under these circumstances.

Section C—Weight Standards and Maximum Allowable Weight (MAW) Standard Adjustments

2-15. *Weight Standards.* Individuals are responsible for keeping their weight within the prescribed weight standards. Weight tables define standards (attachments 2 and 3). Weight checks for all personnel are necessary to ensure compliance with Air Force standards and to identify and assist people who exceed standards. Air Force body fat standards are 20 percent for men 29 years and under; 24 percent for men 30 years and over; 26 percent for women 29 and under; 30 percent for women 30 years and over. Members who are identified as overweight or overfat are entered into the WMP to help them safely lose weight, achieve a professional military appearance, and ultimately, comply with Air Force standards.

2-16. Maximum Allowable Weight (MAW) Standard Adjustments. An adjustment to the MAW standard may be either an approved BFM or weight waiver. Members who exceed the weight table standard may not be overfat. Members who are within the weight table standard may be overfat. To allow for these situations, two methods are available to commanders to adjust a member's weight standard.

a. Body Fat Measurement Adjustment. The unit commander is the approving authority for BFM adjustments. A body fat measurement adjustment may be approved for a person who exceeds the MAW, but presents a professional military appearance. In this instance, the individual may require an upward adjustment of the MAW. Conversely, an individual who is within the weight standard, but does not present a professional military appearance, may require a downward adjustment of the MAW. The unit commander may do a BFM within the unit, or request a BFM be performed as part of a medical evaluation. Procedures: Involvement of a medical practitioner is at the unit commander's discretion. Upon receipt of a medical recommendation or after completing the BFM in the unit, the unit commander establishes the member's MAW by using either the tables at attachment 2 or 3, or the BFM results at attachment 4. The commander should consider personal appearance and if provided, the medical practitioner's recommendation, when establishing the MAW.

b. Weight Waiver Adjustment. The base commander is the approving authority for weight waiver adjustments. A weight waiver adjustment may be approved for people who exceed their MAW, are not clinically obese, present a professional military appearance, and the BFM does not adequately adjust their MAW. Procedures: The unit commander refers the member to the medical practitioner for a clinical obesity evaluation. The medical practitioner responds to the unit commander stating the member is or is not clinically obese and, if considered appropriate, recommends a MAW standard adjustment. The unit commander indorses the medical evaluation to the base commander recommending approval or disapproval. The base commander establishes the member's MAW based on the medical practitioner's and unit commander's recommendation, or disapproves the request. The decision is returned to the member's unit commander.

c. MAW Adjustment Procedures. The unit commander advises the member and the member's immediate supervisor of an approved or disapproved MAW adjustment. If the member is not in the WMP, the unit weight program manager reports an approved MAW adjustment (code 4) to CBPO/DPMQA. If the member is in the WMP, the adjustment does not excuse the member from completing the WMP. Members in the WMP must progress through the 6-month observation period (code 3) and 1-year probation period (code 7) before the adjustment is reported to the PDS as code 4. Individuals with approved MAW adjustments are weighed at least semiannually and the adjustment is at least administratively revalidated semiannually by the unit commander. Approval

satisfactory or unsatisfactory progress (attachment 15). The unit commander will report changes in progress but need not provide a letter to reconfirm the member's current code. For example: Member is code 1, satisfactory, in January. Remains satisfactory until April. No letter is required in February or March. Letter required in April to indicate code 2, unsatisfactory progress.

d. 6-Month Observation Period (Code 3). When the WMP participant is within the established weight standard (MAW, BFM or Weight Waiver), the PDS must be updated. The unit commander will provide the individual and CBPO/DPMQA a letter indicating placement into code 3 (attachment 7). Code 3 will remain valid for 6 months, unless the member gains weight to exceed the established weight standard. Unit commanders will report a weight gain that exceeds the established standard as unsatisfactory (code 2) to CBPO/DPMQA (attachment 15).

e. WMP Removal and Probation Period (Code 7). Once a member has satisfactorily completed the 6-month observation period, the unit commander will notify CBPO/DPMQA (attachment 9). This also moves the person into the 1-year probation period. The 1-year probation period will identify those who have completed the WMP. On satisfactory completion of the probation period, the individual's information will be automatically removed from PDS, no notification procedures are required.

f. Maximum Allowable Weight (MAW) Standard Adjustment (Code 4). When the BFM or weight waiver adjustment is initially approved by the unit commander, it must be reported to the CBPO/DPMQA (code 4). Periodic reviews must also be reported to the CBPO/DPMQA for update. If a member receives a BFM or weight waiver adjustment and also is in the WMP, the MAW adjustment is not reported to CBPO/DPMQA since WMP codes remain in the PDS. BFM or weight waiver adjustments, code 4, will not appear in PDS until after the member completes the probation (code 7). If at that time the adjustment is still valid, notify CBPO/DPMQA so the PDS may be updated, code 4.

g. Temporary Medical Deferral (Code 5). A WMP participant may receive a temporary medical deferral (code 5). The unit commander will notify CBPO/DPMQA of all temporary medical deferrals approved for WMP participants (attachment 15). Code 5 may remain valid for 12 months (except 18 months for pregnancy, if necessary), but must be revalidated by the unit commander to CBPO/DPMQA at least every 6 months. Members who have an approved MAW adjustment (code 4) or are in the probation period (code 7) and receive an approved temporary medical deferral need not be entered into code 5. Code 5 is used only for members in the WMP.

and semiannual reviews of the MAW adjustments are recorded on the AF Form 379 and reported to the CBPO/DPMQA for PDS update. Should the member exceed the approved MAW adjustment, the member is entered into Phase I of the WMP and is reported accordingly. The unit commander may reevaluate either MAW adjustment at any time. Based upon the recommendation of the medical practitioner and (or) an unacceptable military appearance, unit commanders may revoke a BFM adjustment any time. Unit commanders may also recommend a weight waiver be revoked by the base commander at any time. Members and their immediate supervisors are advised in writing of any change to the member's MAW adjustment. If the revocation of the MAW adjustment places the member in the WMP, the commander may allow at least one month enabling member to reach the newly defined standard. If member does not meet the newly defined standard by the time the commander specified, then entry into the WMP is appropriate.

2-17. Appeal Procedures for MAW Adjustments. A member may appeal a decision to approve, disapprove, or revoke a MAW adjustment.

a. The wing or equivalent commander is the final approval or disapproval authority for MAW adjustment appeals. The wing commander may act individually by case file review, by individual presentation, or may convene an appeal council of officers for determination of proper disposition of the appeal. An appeal council of officers may be created on an ad hoc basis. If the appeal council option is elected, the wing commander (or representative) is responsible for selection of members and establishing council procedures. The wing commander's final decision is sent by letter to the individual's unit commander, who informs the individual and supervisor. During the appeal process, the WMP participant is weighed monthly, but is not subject to administrative action. Appeal procedures are outlined below:

b. The individual initiates an appeal in writing (attachment 14) to the wing commander through the appropriate chain of command within 10 duty days after notification of the MAW adjustment decision (attachment 13). All appeals must include indorsements of the immediate supervisor, unit commander, and the base commander. If unusual circumstances warrant, such as temporary duty (TDY), hospitalization, emergency leave, the 10 workday suspense may be adjusted by the unit commander accordingly.

c. The unit commander provides the following documents as a part of the appeal application:

(1) WMP case file.

(2) Current records review Report on Individual Personnel (RIP).

(3) Copies of last three APRs or OERs.

(4) Copy of AF Form 1137, Unfavorable Information File Summary, if applicable.

(5) Unit personnel folder (if applicable). The RIP and copies of last three APRs or OERs will be provided to the unit commander by CBPO/ Military Personnel (DPM) upon request.

Section D—Weight Program Requirements

2-18. Weight Program Requirements. The MAW tables (attachments 2 and 3) by no means reflect individuals' desired weight but rather their "maximum allowable weight." Desired weight is the weight at which a person should have the best life expectancy. Desired body weight is usually determined individually depending upon the person's bone structure and muscle mass. As a rule of thumb, 10 percent below individual's MAW for height more closely approximates his or her desired weight as calculated by the accepted height and weight charts. Maintaining a desired weight is medically prudent. The weight program requirements apply to all Air Force members. There are no exceptions for flying personnel under the provisions of this regulation. Flying personnel who are determined overweight by the unit commander are referred to the servicing flight surgeon for medical evaluation. The flight surgeon decides if the overweight condition is a threat to flying safety, member's flying status, and forwards appropriate documentation and recommendations to the servicing flight management officer and unit commander. The flight surgeon then refers members to the DBMS appointed medical OPR for the base weight program for evaluation for possible entry into the WMP.

2-19. Weight Checks, Height Measurements, and Scale Calibration:

a. Weight Checks. Air Force members are weighed semiannually during the months of January and July. However, members who are 10 percent or more under their MAW, only require an annual weight check. Unit commanders and supervisors may weigh members as often as deemed necessary; for example, if they believe a member exceeds the weight standard and (or) does not present a professional military appearance, a weight check may be required. Event-related

weight checks (for example, weight checks prior to PME, TDY or PCS) occurring in January or July may satisfy the semiannual or annual requirement. For specific weight check procedures, see attachment 1, paragraph a.

b. Height Measurements. A member's official height is determined at the commander's first directed weigh-in after the member arrives PCS or the unit commander may elect to use the height from the individual's last official physical exam. The official height is documented on AF Form 379 and may be used for the duration of the member's assignment to the installation. Unit commanders may remeasure a member's height if deemed necessary. For specific height measurement procedures, see attachment 1, paragraph b.

c. Scale Calibration. Scales should be calibrated every 12 to 15 months. (Reference AFTO 33K-1-100.) Movement of scales should be avoided. Placement of scales on noncarpeted surface or plexiglass is recommended.

2-20. Permanent Change of Station (PCS) or Permanent Change of Assignment (PCA) Procedures. In addition to the semiannual or annual weight checks, members will be weighed upon receipt of PCS notification and prior to PCS departure.

*a. Upon notification of PCS assignment, losing commanders ensure each member, whether or not in the WMP, is weighed. Another weight check is conducted NET 45 and NLT 30 days before projected departure date. Members making unsatisfactory progress in the WMP, are removed from assignment unless making a mandatory move according to AFR 39-11 or AFR 36-20. The unit commander will immediately notify CBPO/Outbound Assignments, Personnel Utilization Section (DPMUO) and CBPO/DPMQA if a member is making unsatisfactory progress in the WMP. Members may become eligible for PCS assignment when entered into Phase II of the WMP.

b. PCA reassignment for members in the WMP is permissible when losing and gaining unit commanders are in agreement and rehabilitative efforts are not interrupted.

c. No earlier than 45 days and NLT 30 days before PCS or PCA reassignment projected departure date, the losing unit will provide the gaining unit commander the WMP case file by transmittal letter. The relocation processing letter (see AFR 35-17, attachment 2) will be completed and returned to CBPO/DPMUO by the established suspense date.

d. Commanders of the losing and gaining units will correspond with each other to resolve questions concerning individuals in the WMP. Information copies of such correspondence are addressed to the parent base or MAJCOM/DP/(MP).

e. Gaining commanders ensure members in the WMP are weighed upon arrival and the AF Form 393 is annotated. Weight checks of all other personnel upon arrival are at the discretion of the gaining unit commander.

2-21. Temporary Duty (TDY) Procedures:

a. General Policy:

(1) A member's TDY eligibility may be affected by his or her WMP status. Except where specified below, unit commanders determine TDY eligibility. TDY and parent unit commanders will communicate directly regarding member's status in the WMP. Personnel are not automatically excluded from mobilization deployment, military or operational exercises because they are in the WMP or making unsatisfactory progress.

(2) TDY unit commanders have the authority to enter personnel in the WMP, monitor progress and take administrative action concerning TDY members who are in the WMP or who are found overweight and must be entered in the WMP.

(3) Personnel who have an approved BFM or weight waiver adjustment will hand-carry a copy of the approved adjustment documentation to the TDY unit commander.

(4) If in the WMP, a copy of AF Form 393 will be hand-carried by the WMP participant to the TDY unit commander.

* **b. Command Support TDY.** Command support TDY is considered a TDY to attend a conference, meeting, workshop, manning or staff assistance visit or an orientation. Command support and normal mission requirements will be at the unit commander's discretion. Personnel in the WMP making satisfactory progress must be closely scrutinized by the unit commander before final selection is made and orders processed. Personnel in the WMP making unsatisfactory progress should not be allowed to attend a command support TDY. The unit commander may send the member TDY with MAJCOM/DP(MP) concurrence. The request must be processed through the normal chain of command to CBPO/DPMPC before forwarding to the MAJCOM.

c. Professional Military Education (PME). (See AFRs 50-39 and 53-8.) Unit commanders weigh members selected for PME NLT 3 weeks

and unit commanders. In addition, an information copy will be forwarded to HQ AFMPC Directorate of Assignments, Assignment Policy Section (DPMRPP2). These personnel will be allowed to complete the scheduled training; however, the TDY commander and gaining unit commander will communicate directly with each other to determine the appropriate rehabilitative and administrative action.

Section E—Weight Management Program (WMP) and Related Information

2-22. Weight Management Program (WMP). The WMP is a rehabilitative program that consists of Phase I (initial entry and weight loss period) and Phase II (observation period). The probation period is a follow-on to the WMP and is not a part of the WMP. Individuals who exceed the MAW are sent to DBMS by the unit commander for medical evaluation. Medical evaluation procedures are outlined in AFR 160-17, and will be completed within 10 working days from the date the member acknowledges receipt of the unit commander's notification letter of WMP appointments (attachment 10). The designated DBMS representative will evaluate each member to determine clinical obesity, if safe weight loss can occur, and if entry into a 90-day exercise program is feasible. The BMS representative will perform a BFM, if deemed appropriate, or the unit commander requests one. (BFM generally is not required if the individual is more than 10 to 15 percent above MAW). Results of the medical evaluation will be provided to the unit commander (attachment 11). Diet counseling will be provided by the appropriate medical representative to define a weight loss program that will not adversely affect the member's health and will assist his or her meeting the MAW.

2-23. Phase I (Initial Entry and Weight Loss Period). On receipt of the DBMS evaluation, the unit commander will enter the member into the WMP if the individual is overweight or overfat. The unit manager weighs the member after the medical evaluation and records the weight on the AF Form 393 to ensure an accurate entry weight is documented. The unit commander will inform the member in writing of formal entry into the WMP and will establish the member's MAW (attachment 6). NOTE: The MAW is not the desired body weight but the maximum body weight (paragraphs 1-2g and 1-2h). Commanders may apply the weight tables, the BFM or the weight of an adjusted weight waiver. Health and appearance concerns should be used in setting standards.

a. The commander will advise enlisted members they are ineligible for reenlistment, PCS reassignment (if making unsatisfactory progress), voluntary retraining, PME attendance, and similar career actions. Commanders must advise enlisted members they may be eligible to test and be selected for promotion but will not assume a higher grade, if selected, until their MAW is met and they are recommended for promotion. Each of these career actions apply until such time that he or she is within the weight standard (entered into Phase II). Officers are advised they are ineligible for PCS reassignment (if making unsatisfactory progress) or to attend PME. Career actions for officers and enlisted members concerning promotion, regular appointment, indefinite reserve status, reenlistment, and PCS reassignment, will be processed by unit commanders according to the governing directive for that action (attachment 24).

b. Reserve members may extend to cover the period of time required to comply with the weight standards; for example, a male member who exceeds the weight standard by 20 pounds would be allowed to extend 4 months. According to U.S.C. Title 32, Section 302, minimum extension period for ANG members is 6 months.

c. Quarterly diet counselings are mandatory during Phase I and enrollment in a 90-day exercise is mandatory for all members in Phase I (reference attachment 16). Extension beyond 90 days is at the unit commander's discretion. (See attachment 6).

d. The individual will acknowledge receipt and understanding and date the letter of notification. The date the member acknowledges receipt will serve as the official entry date in the WMP (code 6). Copies of the Initial Entry Letter will be distributed at a minimum to the individual, his or her supervisor, CBPO/DPMQA and unit weight program manager for inclusion in the WMPCF.

e. During Phase I, individuals will be weighed on a monthly basis. Commanders may weigh members more frequently to reinforce rehabilitative efforts; however, only the weight check at the end of the monthly period will be considered as an official weigh-in. (Water retention during the week before a menstrual cycle is not uncommon. Commanders may adjust women's weigh-in dates accordingly.) Satisfactory weight loss is 5 pounds each month for men and 3 pounds each month for women. The difference in weight loss required between men and women is based on body

composition and physiological differences. Men normally have more lean tissue mass (muscle) than women. Calories are burned in lean tissue mass. Therefore, men have a greater opportunity to burn calories (lose weight) than women. Successful completion of Phase I allows a member to be entered into Phase II.

2-24. Phase II (Observation Period). Members are notified in writing when they meet their MAW and are officially entered into Phase II (code 3) for 6 months.

a. A weight gain over the MAW at any time during this phase constitutes unsatisfactory progress (code 2) and members are returned to Phase I of the WMP with appropriate administrative action by the unit commander according to paragraph 2-28. The member must be advised in writing that career actions such as reenlistment, promotion, and PCS reassignment, once again apply.

*b. During this 6-month phase, at least monthly weigh-ins are required to make sure individuals maintain their weight at or under the MAW. Commanders and supervisors also will ensure the individual continues to receive quarterly diet counseling during this phase of the WMP to enhance the lifestyle change. Commanders may require continuation of the 90-day exercise program.

*c. When members are identified as exceeding their MAW but subsequently meet their standard by the time the medical evaluation results are provided to the unit commander, the members are entered directly into Phase II. Commanders will enter them into a minimum 90-day exercise program. Extension beyond 90 days is at the unit commander's discretion. The provisions of b above apply.

*d. An individual is considered officially removed from the WMP upon successful completion of Phase II and receipt of the unit commander's letter entering the individual into the probation period (attachment 9). The date of removal is the date the individual acknowledges receipt of the removal letter.

2-25. Probation Period. After removal from the WMP and entering the probation period, monthly weight checks and quarterly diet counselings may be discontinued; however, individuals remain identified in the PDS for 12 months (code 7) from the effective date of WMP removal. While in the probation period, commanders and supervisors should reinforce positive lifestyle habits and, when necessary, identify repeat offenders of Air Force standards of weight.

a. Commanders and supervisors should be aware these individuals are in a probationary period and a weight gain over the MAW at any time constitutes unsatisfactory progress (code 2). In such instances members are reentered into Phase I of the WMP. If the member has not had a medical evaluation within the past 12 months, an evaluation must be completed prior to reentry into Phase I. If a medical evaluation was completed during the past 12 months, another evaluation is not required. Upon reentry, commanders will take appropriate administrative action according to paragraph 2-28.

b. Following completion of the 1-year probation period, if the member again exceeds MAW, he or she is entered into Phase I of WMP (PDS code 6), without prejudice of previous WMP participation.

2-26. Participation in a 90-day Exercise Program. Unit commanders will direct individuals to participate in a 90-day exercise program when entered into Phase I of the WMP. Members entered directly into Phase II of the WMP will also be required to complete the 90-day exercise program. Participation in a 90-day exercise program is documented on AF Form 1975, Personal Fitness Progress Chart. Extensions beyond 90 days are at the unit commander's discretion.

a. Unit commanders may direct individuals to participate in a 90-day exercise program if they do not present a professional military appearance although they may not be overweight. A downward BFM may be appropriate (paragraph 2-16a). Members in this category should be sent to DBMS for a medical evaluation before entry into the 90-day exercise program. Commanders should notify the member and supervisor of the 90-day exercise program requirement and reason for entry. When military appearance is the reason for entry, the commander should also specify in writing the expected criteria and the date for successful completion and removal.

b. While individual physical conditioning is an individual responsibility and should be performed primarily during normal off-duty time, unit commanders have the prerogative to allow on-duty conditioning when possible as mission requirements permit.

2-27. Temporary Medical Deferral. A WMP participant may receive a temporary medical deferral from a weight loss program on 90-day

exercise program. PDS code 5 is used only when the temporary medical deferral applies to the weight loss program. A medical practitioner must recommend a temporary medical deferral to the unit commander by documenting the individual's limitations or condition, or both, on an AF Form 422. The unit commander is final aproval or disapproval authority for temporary medical deferrals. Approved temporary medical deferrals only may be granted for the length of time as specified on the AF Form 422 or a maximum of 6 months, whichever is shorter. After an initial 6-month increment, the unit commander will review the temporary medical deferral for possible continuation. In those unique situations that clearly justify an additional deferment, the unit commander may approve a maximum 6 month-continuation. The results are recorded on AF Forms 379 and 393. Unit commanders may not approve temporary medical deferrals to exceed 12 months. A temporary medical deferral beyond 12 months must be approved by the base commander (except for pregnancy, see b below). The request should include the following information through the unit commander in the justification for extension: background on the medical condition, approval dates of previous medical deferral, medical diagnosis, when the medical problem may be resolved, and any other pertinent information. After the temporary medical deferral expires, the unit commander weighs the member and takes appropriate action according to this regulation.

a. Any member in the WMP who receives an approved temporary medical deferral which precludes his or her ability to lose weight will be placed in an inactive status (code 5). On removal from the temporary medical deferral the member is weighed and the unit commander determines appropriate action. If the member is not within his or her MAW, placement into Phase I is required. The member is placed in satisfactory status (code 1) until the next monthly weigh-in period following removal from the inactive status. If an unsatisfactory progress period occurs, the level of administrative action is determined by the member's progress in the WMP since initial entry; that is, disregard the inactive period. If the member has met his or her MAW, entry into Phase II is appropriate.

* b. Pregnant women who are in the WMP are placed in an inactive status and reported to CBPO/DPMQA as temporarily medically deferred (code 5). The pregnancy deferral expires 90 days after termination of pregnancy, unless extenuating circumstances occur and medical documentation is provided on a subsequent AF Form 422. The unit commander has the authority to approve up to 18 months of the temporary medical deferral for pregnancy without seeking the approval of the base commander. The medical practitioner is encouraged to use AFM 160-8, chapter 3, as an appropriate guide for prescribing a diet during pregnancy to prevent excessive weight gain. At a minimum, AFP 166-21 is available to support prenatal diet counselings.

*2-28. **Administrative Actions.** Individuals who fail to comply with the prescribed weight standards as outlined in this regulation are entered into the WMP. They are ineligible for reassignment (if making unsatisfactory progress) and will have rendered themselves ineligible for reenlistment, retraining, and other career opportunities. Administrative action on individual Reserve participants will be according to paragraph 2-4b(2). An AFRES supplement to AFR 35-11 will address the administrative actions for unit assigned reservists. An ANG supplement to AFR 35-11 will address the administrative actions for members of the ANG.

a. It is the member's responsibility to be at or below the established weight standard. Members who exceed the MAW are not within Air Force standards. The WMP is designed to assist and encourage a safe, healthy weight loss and to encourage a lifestyle change.

b. The WMP is a rehabilitative program that provides a medical evaluation, recurring diet counseling, a 90-day exercise program, and a stabilized environment. The member should be encouraged to maintain a positive attitude toward the program and follow instructions provided by both diet and conditioning counselors. Positive individual participation should result in satisfactory progress in the WMP. If an individual is not making satisfactory progress (less than 5 pounds each month for men or less than 3 pounds each month for women), commander's action is required. Commanders exercise their prerogative by selecting an administrative action or actions from the appropriate Unsatisfactory Period List (e below).

c. Return to Phase I from Phase II or the probation period requires administrative action. Action must come from a level equal to or more severe in action than the last one used when the member was in Phase I. This approach is designed to minimize inconsistencies and inequities among units (e below).

d. Nonjudicial punishment may not be imposed

Commander" APR.

7. Deny or Vacate NCO Status (Sergeant, Senior Airman).

(3) Third Unsatisfactory Period. Previous rehabilitative actions should be considered when determining the action which is appropriate for the third failure to make satisfactory progress in the WMP. The lack of commitment in meeting Air Force standards may not only reflect poorly on the individual, but also on the individual's commander and unit. An overweight condition limits flexibility, endurance and contributes to heart disease, thereby creating a negative impact on the readiness of the force. Unit commanders should caution members that another unsatisfactory period may result in administrative separation (see (4) below).

(a) Options for Officers:

1. Letter of Reprimand.

2. Establish UIF.

3. Limit or Remove Supervisory and (or) Command Responsibilities.

4. Control Roster.

5. Comment in OER on Unsatisfactory progress; consider lack of progres when evaluating "Professional Qualities" and (or) prepare a "Directed by Commander" OER.

(b) Options for Enlisted.

1. Letter of Reprimand.

2. Establish UIF.

3. Limit or Remove Supervisory Responsibilities.

4. Control Roster.

5. Comment in APR on Unsatisfactory progress; consider lack of progress when evaluating "Bearing" and (or) prepare a "Directed by Commander" APR.

6. Deny or Vacate NCO Status (Sergeant, Senior Airman).

(4) Fourth Unsatisfactory Period. The WMP is a rehabilitation program designed to assist, encourage and support a member's personal effort to meet Air Force standards of weight. The member now clearly has indicated his or her unwillingness to meet Air Force standards. The member's repeated failures to make satisfactory progress in the WMP indicate a poor attitude and demonstrate a lack of self-discipline, not only for his or her own well-being but toward the mission of the Air Force as well. Since previous attempts at rehabilitation have failed, commanders are strongly encouraged to initiate administrative separation action. If the unit commander determines separation action is appropriate, the unit commander will follow the procedures contained in AFR 36-2 for officers, or AFR 39-10 for airmen. After the unit commander makes the decision whether to retain or separate an airman, the commander advises the Special Court-Martial authority of the decision. For an officer, the unit commander provides the recommendation for discharge or retention to the initiating commander according to AFR 36-2.

(a) Options for Officers:

1. Administrative Separation or

2. Retention with continuation in WMP and appropriate administrative action from the Third Unsatisfactory Period list.

(b) Options for Enlisted:

1. Administrative Separation or

2. Retention with continuation in WMP and appropriate administrative action from the Third Unsatisfactory Period list.

Section F—Weight Program Documentation

2-29. AF Form 379, Individual Physical Fitness and Weight Evaluation Record. The AF Form 379 is maintained by the unit weight program manager. When a new form is required, the last entries in sections I, II, and III of the old form are transferred. The old form is maintained and attached to the new form. See attachment 20 for completion instructions.

2-30. Maintenance Management Information Control System (MMICS):

a. MMICS units are not required to maintain AF Forms 379. When members are making a mandatory move according to AFR 36-20 or 39-11, the losing unit is responsible for proper completion of AF Form 379 on members being reassigned to units that do not have MMICS. MMICS units that place members in the WMP will prepare an AF Form 393. Members who have an approved MAW adjustment or a medical deferral will have an AF Form 379 documenting their situation. The form also will show the completion of the unit commander's semiannual review. The unit commander will report in MMICS the last result and date an individual is certified as meeting the weight standard.

b. For members involved in a mandatory PCS (not PCA), the AF Form 379 or MMICS training record is sent to the CBPO/DPMUO according to AFR 35-17, attachment 2. The losing CBPO ensures members being reassigned possess an AF Form 379 or MMICS training record (if gaining unit has MMICS capability) before permitting the member to complete final PCS reassignment outprocessing.

PROCEDURES FOR WEIGHT CHECKS AND HEIGHT MEASUREMENT

a. Weight Checks:

(1) The member's weight will be measured with shoes off, and in basic duty uniform.

(2) The member may remove contents of pockets and any extraneous equipment (tools, guns, keys) or outer clothing.

(3) The member should stand still while on the scale.

(4) Measurement should be read with the measurer directly in front or behind the scale if possible. Reading the scale from either side rather than straight-on reduces accuracy.

(5) Subtract 3 pounds for clothing for men and women.

(6) Weight will be recorded to the nearest quarter pound.

(7) Recommend the weight standard tables be prominently displayed near unit weighing scales.

b. Height Measurement. The preferred method for height measurement is the back to hard surface method; however, a scale height-measurement bar is acceptable.

(1) Height will be measured and not transferred from the military identification (ID) card.

(2) Height will be measured without shoes.

(3) Member should stand facing the person measuring him or her with heels together and back straight.

(4) The member's line of sight should be horizontal.

(5) Measuring bar should rest lightly on the crown of the head.

(6) Measurement should be read directly in front of the rod, not at an angle from either side.

(7) Measurement should be taken to the nearest quarter inch.

* WEIGHT STANDARDS - MEN (see note)

HEIGHT (IN INCHES)	MAXIMUM ALLOWABLE WEIGHT (MAW)	INTERPOLATED WEIGHT			10% CRITERIA WEIGH ANNUALLY
		1/4"	1/2"	3/4"	
60	153	153 1/2	154	154 1/2	138
61	155	155 3/4	156 1/2	157 1/4	140
62	158	158 1/2	159	159 1/2	142
63	160	161	162	163	144
64	164	165 1/4	166 1/2	167 3/4	148
65	169	170 1/4	171 1/2	172 3/4	152
66	174	175 1/4	176 1/2	177 3/4	157
67	179	180 1/4	181 1/2	182 3/4	161
68	184	185 1/4	186 1/2	187 3/4	166
69	189	190 1/4	191 1/2	192 3/4	170
70	194	195 1/4	196 1/2	197 3/4	175
71	199	200 1/2	202	203 1/2	179
72	205	206 1/2	208	209 1/2	185
73	211	212 3/4	214 1/2	216 1/4	190
74	218	219 1/2	221	222 1/2	196
75	224	225 1/2	227	228 1/2	202
76	230	231 1/2	233	234 1/2	207
77	236	237 1/2	239	240 1/2	212
78	242	243 1/2	245	246 1/2	218
79	248	249 1/2	251	252 1/2	223
80	254	255 1/2	257	258 1/2	229

NOTE: For every inch under 60 inches, subtract 2 pounds from the MAW. For every inch over 80 inches, add 6 pounds to the MAW.

★ WEIGHT STANDARDS—WOMEN (see note)

Height (in inches)	Maximum Allowable Weight (MAW)	Interpolated Weight			10% Criteria Weigh Annually
		1/4"	1/2"	3/4"	
60	136	136 1/2	137	137 1/2	122
61	138	138 3/4	139 1/2	140 1/4	124
62	141	141 1/4	141 1/2	141 3/4	127
63	142	143	144	145	128
64	146	147	148	149	131
65	150	151 1/4	152 1/2	153 3/4	135
66	155	156	157	158	139
67	159	160 1/4	161 1/2	162 3/4	143
68	164	165	166	167	148
69	168	169 1/4	170 1/2	171 3/4	151
70	173	174	175	176	156
71	177	178 1/4	179 1/2	180 3/4	159
72	182	183 1/2	185	186 1/2	164
73	188	189 1/2	191	192 1/2	169
74	194	195 1/4	196 1/2	197 3/4	175
★75	199	200 1/2	202	203 1/2	179
76	205	206 1/4	207 1/2	208 3/4	184
77	210	211 1/4	212 1/2	213 3/4	189
78	215	216 1/2	218	219 1/2	193
79	221	222 1/4	223 1/2	224 3/4	199
80	226	227 1/2	229	230 1/2	203

NOTE: For every inch under 60 inches, subtract 2 pounds from the MAW. For every inch over 80 inches, add 6 pounds to the MAW.

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WEIGHT MANAGEMENT PROGRAM (WMP) OVERVIEW

- Entry into WMP occurs when member exceeds Air Force standards of weight as defined by AFR 35-11 (paragraph 2-22)

  -- Entry requires medical evaluation, diet counseling, and may include body fat measurement

  --- Unit Commander may adjust maximum allowable weight (MAW) upward or downward based on body fat measurement or may recommend to the base commander an upward adjustment based on weight waiver provision

  --- Member may appeal body fat measurement or weight waiver adjustment decision to wing commander (paragraph 2-17 for procedures)

  -- Entry into Phase I of WMP results in (paragraph 2-23)

  * --- Ineligible for PCS reassignment if making unsatisfactory progress (unless mandatory move) (AFRs 36-20 and 39-11)

  * --- Ineligible to reenlist (AFR 35-16)

  * --- Cannot assume higher grade, if selected (enlisted only)

  --- Cannot attend PME (AFRs 50-39 and 53-8)

  --- Cannot voluntarily retrain (AFR 39-4)

  -- Entry also results in

  --- 90-day Exercise Program enrollment (minimum of 90 days)

  --- Quarterly diet counseling

- Weight loss evaluated by unit commander or representative monthly

  -- Men must lose 5 pounds each month

  -- Women must lose 3 pounds each month

  --- Difference directly attributable to physiological differences

- Unsatisfactory progress is when men do not lose at least 5 pounds each month or women do not lose at least 3 pounds each month (paragraph 1-2w)

  -- Unsatisfactory progress results in

  --- Administrative action by unit commander (paragraph 2-28 for list of administrative actions)

  * --- Note that administrative separation is an appropriate action for repeated unsatisfactory progress (AFRs 36-2, 39-10, and AFR 35-41, volume III)

- When member reaches MAW, moves to Phase II of program (6 months) (paragraph 2-24)

*– Now may be eligible for PCS reassignment, reenlistment, voluntary retraining, PME; may assume higher grade, if selected (enlisted only)

– Continues to weigh monthly

– Continues quarterly diet counselings

– At commander's discretion, continues in a 90-day exercise

— For members entered directly into Phase II, a 90-day exercise program is mandatory

– If member exceeds MAW during Phase II, he or she is returned to Phase I, unsatisfactory progress with administrative action

- When member reaches and maintains MAW for 6 consecutive months, removed from WMP

– Moves to Probation Period

- During Probation Period, WMP data is retained in the Personnel Data System (PDS) for 1 year (paragraph 2-25)

– Monthly weight checks and diet counselings not required

– If member exceeds MAW during the Probation Period, he or she is returned to Phase I, unsatisfactory progress with administrative action

– When member maintains MAW for 1 year following removal from WMP, all data removed from PDS

APPENDIX B

DELTA AIRLINES WEIGHT MONITORING AND REQUIREMENTS

IN-FLIGHT SERVICE HANDBOOK

(This is a verbatim text of

pages 74-76, 85-88.)

5. Weight - An attractive uniform appearance is greatly dependent upon weight. It must be in correct proportion to your height. Keep your weight within the limits of the following table.

HEIGHT	MAX. WT.	+10%	HEIGHT	MAX. WT.	+10%
5'2"	113	12	5'7"	135	14
5'2 1/2"	114	12	5'7 1/2"	137	14
5'3"	116	12	5'8"	140	14
5'3 1/2"	118	12	5'8 1/2"	142	15
5'4"	120	12	5'9"	145	15
5'4 1/2"	122	13	5'9 1/2"	147	15
5'5"	125	13	5'10"	150	15
5'5 1/2"	127	13	5'10 1/2"	152	16
5'6"	130	13	5'11"	155	16
5'6 1/2"	132	14	5'11 1/2"	157	16
			6'0"	160	16

See Section 1.9 for weight monitoring.

Mustaches are acceptable if kept short and neatly trimmed and do not extend below the corner of the mouth; however, "handlebar" or "Fu Manchu" styles are not acceptable. Beards, chin whiskers, or hair on the lower lip are not acceptable.

3. Weight - Attractive uniform appearance is greatly dependent upon weight. It should be in correct proportion to height. Weight allowances without suspension, for male flight attendants are as follows:

HEIGHT	MAX. WT.	+10%	HEIGHT	MAX. WT.	+10%
5'2"	127	13	5'7"	150	15
5'2 1/2"	128	13	5'7 1/2"	152	16
5'3"	130	13	5'8"	155	16
5'3 1/2"	132	14	5'8 1/2"	157	16
5'4"	135	14	5'9"	160	16
5'4 1/2"	137	14	5'9 1/2"	162	17
5'5"	140	14	5'10"	165	17
5'5 1/2"	142	15	5'10 1/2"	167	17
5'6"	145	15	5'11"	170	17
5'6 1/2"	147	15	5'11 1/2"	172	18
			6'0"	175	18

See Section 1.9 for weight monitoring.

1.9 DISCIPLINE

Delta expects its flight attendants to meet and maintain the standards of professionalism for which Delta has become known, recognized, and respected. This image is one which is to be portrayed both on and off the aircraft, and it requires behavior and conduct on the part of Delta's personnel which at no time reflect unfavorably on the Company. Misconduct of any type or continued violation of Company policy or standards of conduct are subject to appropriate disciplinary action which could include termination of employment. All disciplinary action is subject to

department head approval. The following is an explanation of the types of discipline which may be imposed upon infractions of Company policies.

A. Discrepancy - A discrepancy is a written notice which may be issued for infractions of In-Flight Service policies (e.g., violation of appearance/uniform guidelines, tardiness).

B. Loss of Trip Swapping Privileges - Trip swapping privileges may be suspended for a one month period upon infraction of In-Flight Service policy and such is normally levied for the month following the month in which the infraction took place. If the flight attendant has engaged in swapping activity for the following month, the action of No Trip Swaps will be imposed on the next month. (This does not restrict flight attendants from picking up pairings or trips from open time or other flight attendants. It does prohibit a flight attendant with a loss of trip swaps from dropping a trip to another flight attendant.)

   Example: Flight attendant failed to cover an assignment on April 25. Trip swaps had already been approved for the month of May. The flight attendant will be allowed no trip swaps for the month of June.

C. Removal From IFSC/FAIC Programs - Failure to display appropriate and responsible leadership abilities can result in removal of IFSC/FAIC bidding privileges.

D. Removal From Flight Status - A flight attendant who is removed from flight status may not work and receives no flight pay but continues to receive base salary.

for her/his next trip or by payroll closeout for the pay period, whichever comes first. If the certification is not submitted within the necessary period of time, the flight attendant will be docked base and flight pay for the trip missed due to illness, and that absence will be considered to be unexcused. Continued occurrences of unexcused absences may subject the flight attendant to disciplinary action up to and including termination of employment. Continued trends of excessive absenteeism in any case may result in severe disciplinary action including possible termination of employment.

5) Sick Leave Abuse - Abuse of sick leave takes place when an individual utilizes sick leave for any reason other than the fact of illness. Abuse of sick leave is grounds for dismissal.

6) Notification of Illness - Flight attendant must notify local scheduling of illness no later than one hour prior to scheduled report time. Otherwise, the flight attendant may be subject to being charged with a Failure to Cover Assignment. A reserve flight attendant who notifies scheduling of an illness following trip assignment may be subject to disciplinary action.

K. Weight Monitoring and Requirements - Flight attendants are required to maintain their weight in proportion to their height (refer to maximum limitations chart in Section 1.8). Failure to maintain weight standards may result in termination.

1. General Requirements Applicable to All Flight Attendants - A Flight Attendant is required to weigh-in each month during initial probation. The last weight check determines placement on a quarterly or annual weigh-in schedule. All weight checks must be conducted in uniform (jacket and vest not required). The weigh-in may be conducted without shoes and the weight recorded will be minus 3 pounds to allow for uniform garments.

   All flight attendants are subject to uniform/weight/appearance checks at any time. A flight attendant may not weigh-in at a base other than her/his domicile. Each flight attendant must weigh-in no later than the last day of the appropriate month for all weight checks. Flight attendants returning from Maternity Leave of Absence must weigh-in prior to their first trip following Maternity Leave of Absence.

2. Weight Program Categories

   a. Annual Program - Flight attendants who weigh exactly or below the published maximum weight qualify to weigh once yearly (July).

   b. Quarterly - Flight attendants who exceed the published maximum weight by no more than 10% (refer to charts in Section 1.8) may weigh quarterly (January, April, July and October).

   c. Monthly - Regularly scheduled for flight attendants on Initial Probation.

3. Qualification For Weight Program Categories - Weight Program categories are established at each weight check. If a flight attendant qualifies for the Annual Program in a month other than July, she/he need not weigh again until the following July.

4. Medical Considerations - Flight attendants who are unable to maintain their weight at or below the published maximum plus 10%, because of medical reasons, may be eligible for special consideration following individual review by the Vice President - In-Flight Service.

5. Missed Weight Checks

   a. A flight attendant who misses a scheduled weight check for any reason must weigh-in prior to her/his next scheduled trip.

   b. If a flight attendant fails to have a routine weight check by the established date of the month, with no valid reason, it is considered an infraction and the flight attendant is subject to disciplinary action.

6. Disciplinary Guidelines

   a. Removal from Payroll - A flight attendant whose weight exceeds 10% of the published weight maximum for her/his height is removed from the schedule and payroll until weight is returned to no more than 10% above the maximum. (Exception: flight attendants who have requested individual consideration because of medical reasons normally will not be removed from schedule and payroll during the pending review.)

b. Weight Suspensions

1) Vacation/pay anniversary date/ seniority adjustments while on suspension. See Section 1.9E.

2) Medical and Dental Benefits While on Weight Suspension - When a flight attendant is placed on weight suspension, the flight attendant is covered by all medical and dental benefits for a period of 30 days only, provided there has been no 30 day free period earlier in the calendar year. Flight attendants on weight suspension may purchase continued coverage for up to 90 days (with company permission). Requests for this continuance are made through Group Insurance, Department 840, ATL. Coverage will not be honored if the individual engages in other employment during such weight suspension unless approved by Delta prior to engaging in such other employment. Premiums must be paid a month in advance.

1.10 QUALIFICATIONS

A. Flight Attendant Responsibility - All flight attendants must be qualified on each type of aircraft operated in passenger service by Delta and must maintain the qualifications at all times during their service with Delta once qualified.

1. Each flight attendant is responsible for maintaining qualifications in accordance with company and FAA requirements. Unless qualifications are maintained, a flight attendant must be removed from flight status until qualified.

APPENDIX C

UNITED AIRLINES WEIGHT PROGRAM

UNITED AIRLINES

WEIGHT PROGRAM

1. FLIGHT ATTENDANT WEIGHT PROGRAM

A. Weight Maximums - The following weight maximums apply to flight attendants by age group. Besides the indicated maximums, an additional 2 lbs., although not shown on chart, are provided as a buffer for each maximum. All fractions of a pound are rounded down.

	Female				Male				
Height	Age 34 and below	Age 35-44	Age 45-54	Age 55 and above	Height	Age 34 and below	Age 35-44	Age 45-54	Age 55 and above
5'2"	125	128	131	134	5'2"	139	142	145	148
2-¼"	126	129	132	135	2-¼"	140	143	146	149
2-½"	127	130	133	136	2-½"	141	144	147	150
2-¾"	128	131	134	137	2-¾"	142	145	148	151
5'3"	128	131	134	137	5'3"	143	146	149	152
3-¼"	129	132	135	138	3-¼"	144	147	150	153
3-½"	130	133	136	139	3-½"	145	148	151	154
3-¾"	131	134	137	140	3-¾"	146	149	152	155
5'4"	132	135	138	141	5'4"	147	150	153	156
4-¼"	133	136	139	142	4-¼"	148	151	154	157
4-½"	134	137	140	143	4-½"	149	152	155	158
4-¾"	135	138	141	144	4-¾"	150	153	156	159
5'5"	135	138	141	144	5'5"	151	154	157	160
5-¼"	136	139	142	145	5-¼"	152	155	158	161
5-½"	137	140	143	146	5-½"	153	156	159	162
5-¾"	138	141	144	147	5-¾"	154	157	160	163
5'6"	139	142	145	148	5'6"	156	159	162	165
6-¼"	140	143	146	149	6-¼"	158	161	164	167
6-½"	141	144	147	150	6-½"	159	162	165	168
6-¾"	142	145	148	151	6-¾"	160	163	166	169
5'7"	142	145	148	151	5'7"	161	164	167	170
7-¼"	143	146	149	152	7-¼"	162	165	168	171
7-½"	144	147	150	153	7-½"	163	166	169	172
7-¾"	145	148	151	154	7-¾"	164	167	170	173
5'8"	145	148	151	154	5'8"	165	168	171	174
8-¼"	146	149	152	155	8-¼"	166	169	172	175
8-½"	147	150	153	156	8-½"	167	170	173	176
8-¾"	148	151	154	157	8-¾"	168	171	174	177
5'9"	149	152	155	158	5'9"	169	172	175	178
9-¼"	150	153	156	159	9-¼"	170	173	176	179
9-½"	151	154	157	160	9-½"	171	174	177	180
9-¾"	152	155	158	161	9-¾"	172	175	178	181
5'10"	152	155	158	161	5'10"	174	177	180	183
10-¼"	153	156	159	162	10-¼"	175	178	181	184
10-½"	154	157	160	163	10-½"	176	179	182	185
10-¾"	155	158	161	164	10-¾"	177	180	183	186
5'11"	156	159	162	165	5'11"	179	182	185	188
11-¼"	157	160	163	166	11-¼"	180	183	186	189
11-½"	158	161	164	167	11-½"	181	184	187	190
11-¾"	159	162	165	168	11-¾"	182	185	188	191
6'0"	159	162	165	168	6'0"	184	187	190	193

UNITED AIRLINES

B. Weight Program Administration - The program is administered as outlined below according to the weight that is recorded for a flight attendant, and is broken down into four separate weight categories:

Category A - Ten or more pounds below maximum not including a 2 lb. buffer.

F/A will be weighed one time each year (annually) during the calendar month of August.

Category B - Nine pounds under maximum up to and including 2 lbs. over maximum.

F/A will be weighed once every six months (semi-annually) during the calendar months of February and August.

Category C - Three pounds over maximum up to and cluding 10 lbs. over maximum.

1) Flight attendant will be weighed monthly and receive counseling for period of six consecutive months.

2) If at end of six months flight attendant is still 3-10 pounds over maximum, he/she will be removed from active flying status for a ten-day period with pay. At end of the ten-day period, flight attendant meets with local management and indicates whether he/she wants to reduce weight, resign or transfer to another position within the Company.

3) If flight attendant elects to try and reduce, the flight attendant returns to flying and is placed on a weight reduction schedule of 1 lb. per week based on the number of pounds over 2 lbs. above maximum. If schedule is of more than four weeks duration, the flight attendant must report for weight check every four weeks.

4) If the flight attendant does not reduce to 2 or fewer pounds by end of weight reduction schedule, he/she will be removed from flying without pay. The length of this removal is based on the amount the flight attendant exceeds 2 lbs. above maximum with a weight loss of 1 lb. per week up to a maximum of eight weeks. If the flight attendant is not down to 2 or fewer pounds over maximum by end of this removal, he/she will be asked to resign or be issued a letter of charge and terminated from the flight attendant position.

If the flight attendant elects to transfer to another position after ten day removal with pay or after second removal without pay, consideration will be given to him/her over outside applicants.

NOTE: If during the steps outlined in Category C the flight attendant's weight goes down to 2 lbs. or fewer over

maximum, he/she reverts to the weight schedule for Category A or B, whichever is applicable.

Category D - Eleven pounds or more over maximum.

1) Flight attendant will be removed from active flight duties for a ten-day period with pay. At end of ten days, flight attendant will meet with local management and indicate whether he/she wants to reduce weight, resign or transfer to another position with the Company.

2) If at the end of ten-day period he/she is still eleven or more pounds over maximum, and elects to reduce, he/she will remain off schedule without pay and be placed on a weight reduction schedule of 1 lb. per week for every pound over 2 lbs. above maximum. The flight attendant will report for weight check every four weeks during the weight reduction period. If flight attendant is not down to 2 or fewer pounds over maximum at the time of the final deadline date of unpaid weight reduction removal, he/she will be terminated.

   If at the end of the ten days off with pay or prior to the last day of the weight reduction schedule, the flight attendant's weight becomes 3-10 lbs. over maximum, he/she will return to flying status and be given a weight reduction schedule of one week for each pound over the buffer. (See Category C, paragraph 3.)

   If weight goes down to 2 lbs. or fewer over maximum during reduction period, schedule procedures for Category A or B apply, whichever is applicable.

   NOTE: The same option for transfer to another position within UA is available to a flight attendant in Category D as outlined in Category C.

C. Uniform Weight Deductions

   1) Uniform must be worn when weighing in.

   2) All appearance standards must be met for the style uniform worn. This includes shoes.

   3) Domestic Uniform - weights to be deducted are:

      a) 4 pounds for females

      b) 7 pounds for males

   4) Hawaiian Inflight Uniform - weights to be deducted are:

      a) 3 pounds for females

b) 3 pounds for males

D. Miscellaneous Procedures

1) Probationary flight attendants may be required to weigh once a month until completion of the probationary period, at which time the flight attendant enters whichever category is applicable.

2) Pregnant flight attendants who have received MD approval to continue flying are exempt from complying with maximums.

3) Weight exceptions may only be approved through the local Medical Department. Flight attendant should contact MD directly to request exception.

4) Weighing in at out-of-domicile locations is not permitted.

5) At management discretion, a flight attendant may be requested to weigh at any time, except after a trip.

6) The following procedures will apply to a flight attendant whose weight increases to eleven or more pounds over maximum while progressing through Category C.

a) If a flight attendant's weight increases to more than ten pounds over maximum during the first phase of Category C, he/she is placed in the first phase of Category D.

b) If a flight attendant's weight is more than ten pounds over maximum at the end of the second phase of Category C, he/she is placed in the second phase of Category D.

c) If a flight attendant's weight increases to more than ten pounds over maximum while in the third phase of Category C, he/she is removed from schedule without pay. The deadline for weight reduction remains the same.

d) If a flight attendant's weight is three or more pounds over maximum on this deadline date, he/she remains out of schedule and is placed in the fourth phase of Category C. The weight reduction schedule will be based one week for each pound over the buffer, up to a maximum of eight weeks.

UNITED AIRLINES

e) If a flight attendant's weight increases to more than ten pounds over maximum while in the fourth phase of Category C, he/she remains out of schedule without pay. The deadline for weight reduction remains the same. If the flight attendant is not within two pounds of maximum on the final deadline date, he/she will be issued a letter of charge and terminated from the flight attendant position.

7) WOP/PTO that may be granted does not relieve a flight attendant of scheduled weigh-in obligations.

APPENDIX D

LETTERS TO SUBJECTS

4 January 1989

Reply to: Major Janice Varda

Subject: Participation in Survey

To: All Military Personnel Assigned to the USAF Medical Center at Wright-Patterson AFB, Ohio

1. I am an Air Force nurse, currently assigned to the Armed Forces Institute of Technology (AFIT). Before my AFIT assignment I was stationed at the Wright-Patterson Medical Center for five years. Presently I am working on my masters degree in nursing at the Ohio State University.

2. For my thesis study, I am interested in finding out what people participating in mandatory weight surveillance do to maintain or attain their weight standard four weeks prior to their scheduled weigh-in. The thesis study is under the direction of Carol J. Bininger, R.N., PhD. at the Ohio State University, Columbus, Ohio. Attached is a questionnaire that I am asking all military members at the Medical Center to complete.

3. Your participation is voluntary. You will remain anonymous. The questionnaires are not coded and there is absolutely no way that your responses can be traced to you.

4. Please complete both sides of the questionnaire as soon as possible and mail it to me through the medical center distribution system before 13 January 1989. Please do not sign the questionnaire and be sure to seal the envelope so that your reply remains confidential. You may withdraw from this study at any time and returning the completed questionnaire implies consent.

5. Thank you for your help. Without your assistance completion of this study would be impossible.

JANICE L. VARDA, Major, USAF, NC

Attachments: 2
Questionnaire
Self-addressed envelope

9 January 1989

Reply to: Major Janice Varda

Subject: Participation in Survey

To: All Military Personnel Assigned to the USAF Medical Center at Wright-Patterson AFB, Ohio

1. A few days ago you should have received a questionnaire that was designed to find out what people participating in mandatory weight surveillance do to maintain or attain their weight standard four weeks prior to their scheduled weigh-in. As mentioned in the cover letter accompanying the questionnaire, the information collected from the questionnaire will be used for my thesis study at the Ohio State University.

2. If you haven't completed the questionnaire, please take a few minutes and do so now. Return the questionnaire through the medical center distribution system in the envelope provided.

3. Remember, you will remain anonymous and there is absolutely no way your responses can be traced to you.

4. Thank you for your help. Your participation is essential to the success of this study.

Janice L. Varda

JANICE L. VARDA, Major, USAF, NC

Attachments: 2
Questionnaire
Self-addressed envelope

APPENDIX E

QUESTIONNAIRE

USAF SCN 88-111
Exp. 31 May 1989

Q U E S T I O N N A I R E

PLEASE COMPLETE THE FOLLOWING QUESTIONS BY CIRCLING THE APPROPRIATE ANSWER OR BY FILLING IN THE BLANK AS INDICATED:

1. Sex (Circle one)

   Male
   Female

2. Your age today _____

3. Ethnic group (Circle one)

   White Hispanic
   Black Other

4. Height (specify) _____

5. Present weight (specify) _____

6. Maximum allowable weight for me _____

7. Number of times on the Air Force weight program (Circle one)

   0 1 2 3 or more

8. Highest educational level achieved (Circle one)

   High school diploma or equivalent BS or BA
   Some college MS or MA
   AD Doctorate

9. Present status (Circle one)

   Enlisted NCO Officer

10. How long have you been in the Air Force? (Specify) _____

11. Which statement best describes you? (Circle one)

    a. I'm pleased with my present weight.

    b. I'm not pleased with my present weight.

    c. I'm neutral concerning my present weight.

PLEASE TURN THE PAPER OVER AND COMPLETE THE OTHER SIDE.---------->

Below are behaviors that people may engage in prior to a mandatory weigh-in.
PLEASE CIRCLE ALL THE BEHAVIORS THAT APPLY TO YOU DURING THE FOUR WEEKS PRIOR TO YOUR SCHEDULED WEIGH-IN:

1. I don't do anything different.
2. I skip meals periodically.
3. I fast the day before the weigh-in.
4. I cut down on desserts and/or snacks.
5. I follow a special well balanced diet.
6. I exercise more frequently or more intensely.
7. I take over-the-counter diet pills or appetite suppressants.
8. I take prescription diet pills or appetite suppressants.
9. I find myself eating large amounts of food at times.
10. I smoke more cigarettes to decrease my appetite.
11. I take over-the-counter water pills (diuretics).
12. I take prescription water pills (diuretics).
13. I wear a rubber suit while exercising.
14. I take over-the-counter laxatives.
15. I take prescription laxatives.
16. I use a sauna or steam bath.
17. I drink more coffee or tea.
18. I skip two meals a day.
19. I take syrup of ipecac.
20. I skip one meal a day.
21. I make myself vomit.

22. What other things do you do to decrease your weight before weigh-ins? (Specify)

*Be sure you have completed the other side of this survey.

APPENDIX F

LETTERS OF CONSENT

5 October 1988

Reply to: Major Janice Varda

Subject: Survey Approval

To: Captain Roger Goetz

1. Permission is requested to conduct a survey to collect data for a thesis.

2. Title of the survey: "A Study to Identify Potential Weight Reduction Behaviors of Individuals Participating in Mandatory Weight Surveillance."

3. Requestor: Janice L. Varda, Major, USAF, NC
4721 Whitewood Court
Dayton, Ohio 45424
(513) 237-7218

4. Purpose and justification: A questionnaire will be used to gather demographic data and to discover potential behaviors used by individuals prior to a mandatory weigh-in.

The data can be obtained economically and efficiently by using a survey format. The projected data collection period is 14 November 1988 through 28 November 1988.

5. The problem explored by this study is: "To Assure Being Below a Specified Weight, What Do Individuals Participating in a Mandatory Weight Surveillance Program Do Four Weeks Prior to Their Scheduled Weigh-in?"

The research questions are: (1) How does the behavior of overweight individuals compare with the behavior of individuals meeting weight standards within four weeks of mandatory weigh-in? (2) To attain a specific weight, do men and women exhibit different preparatory behaviors four weeks prior to mandatory weigh-in?

6. Statistical Analysis: Because the data will consist of quantitative information at the nominal level these data will be analyzed using nominal level statistics including the mean, median, and mode.

7. Sample: The population of interest is all individuals who participate in mandatory weight surveillance. The sample consists of all active duty military personnel assigned to the United States Air Force Medical Center at Wright-Patterson Air Force Base, Ohio. This sample was selected because of size (approximately 1,000 individuals)

and the fact that all military personnel participate in mandatory weight surveillance.

This research is being conducted in conjunction with a commander directed program, Project Zest, which is in the early stages of development. When completed, Project Zest is projected to be a pilot program to augment the Medical Center's weight management program. Permission to survey medical center personnel concerning potential weight reduction behaviors associated with mandatory weigh-in has been granted by the Medical Center Commander.

8. Method of conducting the survey: A questionnaire, letter of explanation, and a self-addressed envelope will be distributed to each individual through the medical center mail system. Individuals will be instructed to complete the questionnaire within two weeks and return it in the envelope provided through the medical center distribution system.

9. Tabulation: Data will be entered into a computer for computer analysis.

10. Use and disposition of survey results: The data obtained from the questionnaires will be used for statistical analysis for this study. Following the analysis all questionnaires will be destroyed.

11. Estimated cost of the survey: Cost of the survey to the Air Force would be in terms of man hours; approximately ten minutes for each respondent and twenty minutes for one mailroom worker.

12. Use of data from other sources: Data for this study is not available from other sources. This was determined after completion of the computer literature search.

Janice L. Varda

JANICE L. VARDA, Major, USAF, NC

Attachments:
Letters to Subjects
Questionnaires
Privacy Acts

THE OHIO STATE UNIVERSITY

College of Nursing
Department of Life Span Process

1585 Neil Avenue
Columbus, OH 43210-1289
Phone 614-292-8222

October 18, 1988

Thomas Nygren, Ph.D.
Chairperson
Behavioral and Social Sciences
Human Subject Review Committee
1317 Kinnear Road
CAMPUS

Dear Dr. Nygren:

Please review the enclosed proposal, "A Study to Identify Potential Weight Reduction Behaviors of Individuals Participating in Mandatory Weight Surveillance." Janice Varda, a master's student, will be conducting the study under my direction. Enclosed are five copies of the proposal and the summary sheet for Review of Research Development, or Related Activities Involving Human Subjects.

We are requesting a waiver of informed consent. The instrument used in the study is a questionnaire regarding potential behaviors used by individuals prior to mandatory weight surveillance. Voluntary completion and return of the instrument would indicate consent to participate in the study.

If you need further information, please contact me at 292-4513. Thank you for your timely consideration of the enclosed material.

Sincerely,

Carol J Bininger

Carol J. Bininger, R.N., Ph.D.
Assistant Professor
College of Nursing

CJB/tv

BEHAVIORAL AND SOCIAL SCIENCES
HUMAN SUBJECTS REVIEW COMMITTEE
THE OHIO STATE UNIVERSITY

__X__ Original Review
____ Continuing Review

Research Involving Human Subjects

ACTION OF THE REVIEW COMMITTEE

With regard to the employment of human subjects in the proposed research protocol:

88B0160 A STUDY TO IDENTIFY WEIGHT REDUCTION BEHAVIORS OF INDIVIDUALS PARTICIPATING IN MANDATORY WEIGHT SURVEILLANCE,
Carol J. Bininger, Janice L. Varda, Life Span Process

THE BEHAVIORAL AND SOCIAL SCIENCES REVIEW COMMITTEE HAS TAKEN THE FOLLOWING ACTION:

____	APPROVED	____	DISAPPROVED
__X__	APPROVED WITH CONDITIONS*	__X__	WAIVER OF WRITTEN CONSENT GRANTED

* Conditions stated by the Committee have been met by the Investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Review Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: November 4, 1988 Signed: _____
(Chairperson)

HS-025B (Rev. 3/85)

DEPARTMENT OF THE AIR FORCE
USAF MEDICAL CENTER WRIGHT PATTERSON (AFLC)
WRIGHT PATTERSON AIR FORCE BASE, OHIO 45433 - 5300

14 November 1988

Dr Thomas Nygren
Behavioral & Social Sciences Human
Subject Review Committee
The Ohio State University Research Center
1314 Kinnear Road, Room 205
Columbus OH 43212

Dear Dr Nygren

Permission is granted for primary investigator Dr Carol J. Bininger and graduate student Janice L. Varda to conduct research, "A Study to Identify Weight Reduction Behaviors of Individuals Participating in Mandatory Weight Prevalence," at the USAF Medical Center, Wright-Patterson, Wright-Patterson Air Force Base, Ohio.

Subjects will be military personnel assigned to the Medical Center. Participation in this study will be voluntary and individuals will remain anonymous and may withdraw from this study at any time. Return of the completed questionnaire will imply consent.

Sincerely

JERRY J. FOSTER, Col, USAF, MC
Associate Director, Hospital Services

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MILITARY PERSONNEL CENTER
RANDOLPH AIR FORCE BASE TX 78150-6001

28 NOV 1988

REPLY TO ATTN OF DPMYOS

SUBJECT Request of Survey Approval

TO AFIT/XP (Maj Varda)

1. The questionnaire entitled "A Study to Identify Potential Weight Reduction Behaviors of Individuals Participating in Mandatory Weight Surveillance" has been reviewed. Use of the Privacy Act statement is necessary only when Social Security account numbers (SSANs) are being collected. Please do not include this statement in this survey instrument.

2. Upon review, Maj Varda's questionnaire has been approved for use with active-duty military assigned to the USAF Medical Center at Wright-Patterson AFB. The assigned survey control number (SCN) is USAF SCN 88-111, which expires on 31 May 1989. Please place the SCN in the upper right-hand corner of the cover page. Questions can be directed to Mr Lou Datko at AUTOVON 487-5680/2265.

FOR THE COMMANDER

CHARLES H. HAMILTON, GM-13
Chief, Personnel Survey Branch

DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY
AIR FORCE INSTITUTE OF TECHNOLOGY
WRIGHT-PATTERSON AIR FORCE BASE OH 45433-6583

REPLY TO ATTN OF AFIT/XPX

06 DEC 1988

SUBJECT Survey Approval

TO CIMI (Capt Goetz) (Major Varda)

1. Review of Major Varda's survey, "A Study to Identify Potential Weight Reduction Behaviors of Individuals Participating in Mandatory Weight Reduction Surveillance," has been completed by this office and by Mr. Charles E. Hamilton, AFMPC/DPMYOS. The survey is approved provided the one minor change is made before distributing surveys.

2. The assigned USAF SCN of 88-111 and expiration date of 31 May 89 should be displayed on the cover letter or the top right corner of each survey booklet. If you have any questions, please contact me at ext 55760.

KIMBERLY D. FRISCO, 2d Lt, USAF
Asst Chief, Evaluation and Technology

1 Atch
Necessary Change

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