The Prevalence of Fad Diets on a College Campus

An Honors Thesis (HONRS 499)

by

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THESIS ABSTRACT

Thesis: The Prevalence of Fad Diets on a College Campus

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The purpose of this study was to assess the presence of fad dieting, as well as evaluate the results of such fad diets, among male and female students at Ball State University. In this project, 336 students completed a 24-question survey. Forty-seven subjects were eliminated due to age restrictions. The study limitations required subjects to be between the ages of 18-23. The average age for the study was 20 years ± 1.39 years. Of the 289 subjects used, 76 (26%) were males and 213 (74%) were females. One-third (n=93) of the students surveyed said they had tried a fad diet. Of that percentage, 13% (n=10) of the males had tried a fad diet, and 40% (n=83) of the females had tried a fad diet. The results of the longest fad diet tried by students were primarily weight gain or no change in weight. Forty-three percent (n=37) of those who tried a fad diet said they gained weight, while 37% (n=32) said they experienced no change at all. Not surprisingly, 58.1% (n=54) of fad dieters only stayed on the diet for one month or less. Also, 34.4% (n=32) of the fad dieters stayed on the diet for three months or less. Therefore, the survey results showed that a combined 92.5% of the fad dieters were not able to sustain their fad diet of choice for long. Overall, those students who tried a fad diet expressed a dissatisfaction with the results. Forty-six percent (n=34) said fad diets are unhealthy and fail to produce lasting results, while another 14.9% (n=11) viewed such diets as unhealthy. The investigator of this study
believes that college students are no exception to today’s trend of fad dieting. However, this study reflects the failure of such fad diets as a permanent weight loss plan for students.
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CHAPTER ONE

INTRODUCTION

In reaction to a pervasive cult of slenderness, and in a society where thinness is equated with happiness, more and more people are jumping on the fad diet bandwagon. Researchers say at any given time, about one in three women is dieting (Fraser, 1998). Each day a frightening number of consumers call toll free numbers promoting weight loss products on television, send in mail orders for the “magic pills” glamorized in magazine advertisements or race to the grocery store to buy weight loss bars and shakes. With the increase in sedentary lifestyles and a rise in obesity, consumers have transformed dieting into a $40 billion a year industry (Barrett, 1999).

Research shows people generally turn to fad diets because they are unhappy with their bodies and would rather rely upon a “quick-fix” solution instead of a permanent plan of eating right and exercising. However, does a quick-fix solution necessarily work in the long run? The debate is ongoing.

Critics claim few fad diets — if any at all — promote exercise as part of a weight loss strategy. They say exercise is essential, yet often forgotten and instead replaced by obsessive calorie counting. The combination of exercise and proper nutrition has long been promoted as the key to healthy weight loss. Diet advocates disagree.

The following study is geared to assess the presence of fad dieting on a college campus. The study aims to investigate the reasons students choose fad diets, reveal the results of such diets, compare the exercise habits of fad dieters and non-fad dieters and disclose statements from students who support or oppose the use of fad diets.
Statement of the Problem

The following question will be studied:

What is the prevalence of fad diets among male and female college students at Ball State University, and what results — if any — do such fad diets produce?

Need for the Study

Today’s fast-paced, technologically-driven society makes it easier for people to be “on the run” and often ignore a healthy eating and exercise regimen. The need to stay fit and maintain a desirable body image drives many consumers to purchase weight loss products or adhere to an unbalanced diet, hindering their intake of important nutrients.

In a college atmosphere, students also often find themselves in a stressful, fast-paced environment (Burgess, Powers and Robbins, 1999). Bombarded with deadlines and meetings, students attempt to strike a balance between social and educational worlds. Body image plays a major role in such a quest for balance and happiness. Most students want to look good and feel accepted, but also be successful. For “on the go” students, finding time for fitness may not be as easy as popping a weight loss pill or drinking a diet shake (Burgess, Powers and Robbins, 1999).

The college age serves as an important time in which behaviors learned may become habits for life (Burgess, Powers and Robbins, 1999). Poor nutrition and exercise habits during teenage and college years can shape a future of disease or illness for the adult. According to the American Dietetic Association, major health organizations declare that fad diets do not encourage long-term eating patterns and instead promote poor nutrition. Therefore, the following study was one method of determining if such a
belief holds true at the college level, and if students are indeed putting themselves at risk for current and future health problems.

Assumptions of the Study

For the purpose of this research, the following assumptions were made:

1. The subjects were literate.
2. The subjects were willing to cooperate and provide honest, accurate responses to a written survey.
3. The sample was representative of university freshman, sophomore, junior and senior college students, ages 18 to 23, at Ball State University in Muncie, Indiana.

Limitations of the Study

For the purpose of the study, the following limitations were imposed:

1. The sample selection was limited to Ball State University, Muncie, Indiana.
2. The sample was restricted to currently enrolled male and female undergraduates.
3. The sample did not have an equal number of male and female subjects.
4. The subjects were 18 to 23 years of age and attending Ball State University.

Definition of Terms

The following terms are defined as they will be used in the investigation.

1. **Fad diet**: An eating plan that promotes a “quick-fix” solution for weight loss, often over-emphasizing a certain food, nutrient or supplement in the diet, while also excluding exercise.
2. **Weight loss program:** Any program, such as Jenny Craig or Weight Watchers, that has to be purchased and encourages a specific eating regimen through the use of its products and guidelines.

3. **Sedentary lifestyle:** A lifestyle that lacks physical activity and instead engages in non-physical activities such as spending long stretches of time in front of the television or computer.

4. **Obesity:** An excessive accumulation of body fat, i.e. 20% above ideal body weight.

5. **Body mass index:** The ratio between a person’s weight and height in which the assessment of the relationship between weight and health risk is determined. A woman is considered obese if she is over 30% body fat, and a man is considered obese if he is over 25% body fat.

6. **Low-fat diet:** A diet that relies on high-nutrient dense foods to replace fatty, caloric foods, which in turn lowers fat and reduces calorie intake each day.

**Objective**

The broad objective of this study was to determine, among a sample of male and female college students, the prevalence of fad diets on campus, and the results such fad diets produce. The study was also designed to discover and compare the exercise habits of fad dieters and non-fad dieters, as well as examine the levels of self-perception within the two groups.
Hypotheses

H1 = A college campus is not excluded from today's high experimentation with fad diets, and a majority of students who try a fad diet will not be happy with the results.

Several other hypotheses were tested in addition to the main hypothesis for this research project:

H2 = More women than men have tried fad diets.

H3 = A majority of students that try fad diets are dissatisfied with their looks.

H4 = Most students that try fad diets fail to exercise as part of their weight loss plan.

H5 = Most students that try fad diets do not stay on them for long.

H6 = A majority of students that try fad diets will experience no change in weight, or those who experience weight loss will eventually gain the weight back.
CHAPTER TWO
REVIEW OF LITERATURE

For years researches have studied fad diets and the consumers who use them (Fraser, 1998). A high point of interest is the effect fad diets produce, if they produce any results at all. While critics contend that fad diets claim success only through testimonials and not evidence, supporters continue to promote their products and programs as safe and effective.

The purpose of this study was not geared toward squelching society's continuous debate about the healthy or harmful side of fad diets. The hope was to further investigate the prevalence and effect of fad diets on a college campus, as well as the reasons students turn to fad diets.

This review of literature chapter is divided into the following sections: A Specific Look at Obesity, Thinness Means Happiness?, Popular Fad Diets Available Today, The Skinny on Carbohydrates, The Pitfalls of Fad Diets, Why Fad Diets Don't Work, The Key to Successful Weight Loss, Summary and Conclusion.

A Specific Look at Obesity

The United States faces great obstacles in the battle against obesity. One in four Americans is obese and more than 60 percent of the population is overweight, according to the Center for Disease Control and Prevention (2001). Adult Americans have gained an average of 8 pounds in the past decade, a statistic suggesting they are eating more and exercising less.
Why treat overweight and obese individuals? A staggering 300,000 obesity-related deaths occur in the U.S. each year. A direct correlation exists between obesity and increased morbidity and mortality, according to the National Heart, Lung, and Blood Institute (1998). The institute reports that obesity "substantially" raises the risk of death from hypertension, Type 2 diabetes, coronary heart disease, stroke, gallbladder disease, respiratory problems and breast, prostate, and colon cancer. Nearly 70% of the diagnosed cases of cardiovascular disease are related to obesity.

Research suggests that sedentary lifestyles and poor nutrition are prevailing reasons for an overweight society, although heredity can also play a role, according to the United States Department of Health and Human Services (1999). Diets have not changed as much as exercise habits have. Nowadays watching television or surfing the Internet often replaces taking walks or playing sports, and the golden arches of McDonald's often attract more consumers than the dietary guidelines set forth by the United States Food and Drug Association. In adults, a direct correlation exists between the number of hours spent watching television and a person's level of obesity (Burgess, Powers and Robbins, 1999).

In 1996, the Surgeon General's office issued the first government report focusing on the impact of physical activity on the health of American people. The report, titled *Physical Activity and Health: A Report of the Surgeon General*, revealed that 60% — well over half — of Americans are not regularly active. Even worse, 25% of all adults are not physically active at all. The report was partly in response to the 250,000 premature deaths that occur every year in the U.S. due to lack of exercise. The Surgeon
General’s report also revealed that a mere 22% of adults participate in physical activity, while only one-half of people ages 12 - 21 years participate in physical activity. The statistics baffle leading health officials, especially since regular exercise has been shown to reduce risks of heart disease, colon cancer, diabetes and hypertension. Organizations such as the Center for Disease Control and Prevention (CDC) strongly advocate that exercise improves a person’s overall quality of life.

According to Surgeon General reports, people reach their peak of natural fitness during their late teens to early twenties and, unless physical activity is maintained, their bodies are susceptible to aging more quickly. The college student displays early symptoms of hypokinetic disease — diseases caused by underactivity, such as coronary heart disease, cancer, osteoporosis and diabetes — through low energy levels and “creeping” obesity. Without a regular exercise pattern, weight gain can occur and bodies do not perform to their highest potential (Burgess, Powers and Robbins, 1999).

Fighting the obesity battle does not come easy – or cheap. The United States spends nearly $100 billion annually on obesity-related disease, according to the National Heart, Lung and Blood Institute (1998). The institute believes this figure could — and should — be smaller: Instead of waiting to have their problems fixed, individuals, if possible, should take proper steps to prevent such health problems from surfacing.

**Thinness Means Happiness?**

Today’s growing fat epidemic does not continue without paradox. Current culture reflects an obsession with thinness. As many as 40% of women and 24% of men are on a diet at any given time (Fraser, 1998).
But are the diets working? Statistics say “no,” as the nation is only getting fatter. The more people seem to “diet,” the more weight they seem to gain (Fumento, 1997). Mixed messages, confusing research results and “quick fix” solutions add to the dieting woes and frustrating quest for thinness by Americans.

The desire for fast weight loss plagues many at an early age, according to “Vitality” magazine (1999). The magazine reports that an alarming 66 percent of fifth through 12th-grade girls want to lose weight. In a different study conducted by Eating Disorders Awareness and Prevention, researchers discovered young girls are more afraid of becoming overweight than they are of nuclear war, getting a disease such as cancer, or losing their parents (Barrett, 1999). The obsession with thinness has transcended beyond losing weight to stay healthy, but rather to lose weight for improved looks and self-gratification. Furthermore, the early age at which such a fixation begins stands as another area of concern.

**Popular Fad Diets Available Today**

For years fad diets of all kinds — high-protein, liquid, herbal — have found themselves at the tip of consumers’ fingertips, and of course, pocketbooks. Get-thin-quick plans flood advertisements and target consumers in search of the perfect bodies. The lure of the fad diet has continually held strong, enticing almost anybody and everybody who desires to shed some unwanted pounds (Rhodes, 1996). The following section introduces and discusses various types of fad diets available to consumers.

**Over-the-counter diet drugs**

Metabolife, Dexatrim, Dynatrim, Acutrim, Thin & Trim: Weight loss pills and appetite suppressants are among the many “quick fix” products used by consumers. Pills,
shakes, bars, "magic" in a bottle — the list could continue — all wait on shelves with an array of endless products from which consumers can choose. Over-the-counter diet drugs are often sold in drugstores, health-food stores and supermarkets. Many diet companies claim increased energy and better weight management results come from their product. With no restrictions placed on the sale of such drugs, anybody can buy as many of the products as desired (Barrett, 1999).

**Liquid diet**

Shakes such as SlimFast fall into another diet category known as the liquid meal or diet. Instead of eating meals, consumers are told to drink a shake at one or more of their three meals for the day. Chocolate, vanilla, strawberry, mocha, raspberry — the flavors are numerous and the promotion is simple. Liquid meals are meant to "taste great" while also helping consumers to lose weight (Barrett, 1999).

**Herbal diet**

Dieter's teas are known as herbal teas containing senna, aloe, buckthorn and other plant-derived laxatives. These products are purchased in health-food stores or through catalogs and are often used for weight loss. Dieters use such teas with the belief that increased bowel movements will prevent the absorption of calories in their body, thus preventing the possibility of weight gain (Kurtzweil, 1997).

**Low-carbohydrate, high-protein diet**

Among today's most common — and controversial — fad diet is the low-carbohydrate, high-protein diet. The low-carbohydrate diet has consumers viewing the cow as sacred when it comes to nutrition. Nowadays new diet books come out one after another, all carrying the same basic anti-carbohydrate, high protein message that tell
consumers to ignore the dietary recommendations from the CDC, the United States Department of Agriculture (2001) and the American Heart Association (2001). The Wheat Food Council and Washington State Dairy Council (1999) has issued a list of today's most common low-carbohydrate fad diets and the eating plans they promote:

**Dr. Atkins' New Diet Revolution**

Dr. Atkins' New Diet Revolution is widely considered one of today's most popular fad diets. The Dr. Atkins craze began in the 1970s and then faded before resurfacing in recent years (Manore, 1999). This diet claims carbohydrates make people "fat," and that its "eat as much meat and fat as you want" plan works fast and keeps a person satisfied. The Dr. Atkins diet pushes for high fat and protein rather than complex carbohydrates, recommending as much as 50 - 60% of daily calories from fat and protein (American Heart Association, 2001). Eating large quantities of protein in unlimited amounts, including meat, fish, shellfish, poultry, eggs and cheese, is encouraged, while the consumption of breads and pasta is eliminated. In other words, bacon and eggs fill the breakfast table while cereal and toast are left behind.

**Sugar Busters**

Sugar Busters also promotes a low-carbohydrate diet for quick weight loss. The big catch of this eating plan is that it calls for no sugar in the diet. The authors claim sugar is "toxic" to the body and causes it to release insulin and store excess sugar as body fat.
The Zone Diet

The Zone Diet labels carbohydrates as the enemy for the same reasons as Sugar Busters, stating carbohydrates cause bodies to overproduce insulin. Like Dr. Atkins, author Barry Sears claims carbohydrates “make you fat.”

Protein Power

*Protein Power*, by authors Michael and Mary Eades, claims the body has “no need for carbohydrates,” and therefore, carbohydrates should be avoided or eliminated altogether.

Summary

As a whole, over-the-counter diet drugs, liquid diets and herbal teas promote the exclusion of certain minerals and nutrients in an everyday eating plan. Furthermore, low-carbohydrate, high-protein diets all place an emphasis on protein and fat rather than the consumption of grains, fruits and vegetables in the diet. The validity, effectiveness and risks of such diets are examined further in this paper.

The Skinny on Carbohydrates

Carbohydrates, despite being blasted by fad diet promoters, are necessary to a healthy diet, according to the American Heart Association and other health professionals. Carbohydrates fuel the brain and replace muscle and liver glycogen stores by maintaining blood glucose (Manore, 1999). When carbohydrate intake is restricted, the body’s glycogen supply is reduced, which in turn depletes the body’s energy. For years the USDA has supported its own dietary recommendations through the Food Guide Pyramid. The Dietary Guidelines for Americans recommend consumers get 50 - 60% of daily calories from carbohydrates, no more than 30% of calories from fat and 10 - 20% of
calories from protein. Overall, carbohydrates are considered by leading health organizations as an essential, fuel-providing part of a healthy diet.

**The Pitfalls of Fad Diets**

To date no major health care organization embraces fad diets. One qualm health care officials possess is toward fad diet book authors and their lack of credibility (American Institute for Cancer Research, 2001). For example, although Dr. Robert Atkins is a medical doctor, he has no formal training in nutrition. Barry Sears, author of *The Zone Diet*, has a Ph.D. in biochemistry, but no formal training in nutrition. *Protein Power* authors Michael and Mary Eades are medical doctors, but like the others, have no formal training in nutrition. What should this tell consumers? According to the American Institute for Cancer Research (2001), people who are not even trained in the nutrition field are devising weight loss diets and strategies for the public.

Unlike in fad diets, moderation is stressed with meeting the recommendation of the dietary guidelines. As mentioned earlier, the USDA dietary recommendations promote 50 - 60% of total calories from carbohydrates, no more than 30% of total calories from fat and 10 - 20% of total calories from protein. Daily caloric guidelines range from 1,600 - 2,800 calories, depending on a person’s gender and his or her activity level. The Food Guide Pyramid eating plan — if followed — does not eliminate any nutrients in a person’s diet, whereas fad diets tend to overemphasize one particular food group.

The American Institute for Cancer Research (AICR) has evaluated several fad diets such as Dr. Atkins’ New Diet Revolution and Protein Power. In its evaluation, the
AICR cites the limitations and possible health risks associated with fad diets. The following are some “major flaws” the AICR found:

1) Fad diets prescribe a daily caloric intake that is “well below average requirements.”
2) They omit certain foods — sometimes even entire food groups — that deprive a body of key nutrients.
3) They are “out of balance,” recommending proportions that are a far cry from those recommended by major health organizations such as the USDA, the AHA and the American Dietetic Association, as well as the Surgeon General.
4) Low carbohydrate, high-protein diets promote the loss of water weight, providing dieters with a false sense of accomplishment since weight returns quickly.
5) Fad diets can cause ketosis, a condition in which the body begins to metabolize muscle tissue instead of fat. Ketosis can lead to muscle breakdown, nausea, dehydration, headaches, irritability, bad breath and kidney problems.
6) Protein-rich diets tend to be full of saturated fat and cholesterol, leading to health problems such as increased risk of heart disease and gastrointestinal problems due to lack of fiber.

The pitfalls of low-carbohydrate diets become very clear when holding them up to the standards of AICR and other major health care organizations. For example, in Sugar Busters and The Zone Diet, a person’s caloric guidelines also stand at a restrictive 800 - 1,200 calories. Also, the Dr. Atkins diet can restrict a person’s daily caloric intake to 800 calories. In essence, by following these diets a person is eating at least 800 calories less
than what is recommended by the Food Guide Pyramid, while also excluding important nutrients such as carbohydrates, vitamins, minerals and fiber. Lower calories and less nutrients means lower energy levels and more health risks. Furthermore, as said best by Melinda Manore, nutrition professor and member of the USA Gymnastics National Health Care Advisory Board, "If the Dr. Atkins diet of the 1970s had worked, there would be no need for the 'new and improved' Dr. Atkins' New Diet Revolution." Also, if the other low carbohydrate diets really worked, major health care organizations would be promoting — not criticizing — them.

To date, very little research has been done on the Dr. Atkins diet. However, in a 1999 study by the Journal of Clinical Investigation, researchers aimed to compare the results of low-carbohydrate diets and mixed diets. Subjects were studied in three different diets: a starvation diet (no calories consumed), a no-carbohydrate diet providing calories from fat and protein only, and a mixed diet providing calories from protein, fat and carbohydrates (Manore, 1999). Subjects were randomly assigned to each of the 10-day diets, with a 5-day mixed diet fed between treatments. The study found that most weight was lost on the starvation diet (1.5 pounds per day) and the least was lost on the mixed diet (0.5 pounds per day). The no-carbohydrate diet produced almost twice the weight loss of the mixed diet. However, the study determined that a majority of the weight lost from the starvation and no-carbohydrate diets was water weight (60%). When the subjects returned to their normal diet, they gained weight due to rehydration. Those on the mixed diet continued to lose weight. Therefore, this study shows that a low-
calorie, low-carbohydrate diet yields quick weight loss. However, a significant amount of the weight loss stems from water loss and is regained quickly after the diet is finished.

Over-the-counter diet drugs also do not come without controversy. Even when the Food and Drug Administration (FDA) knows that a product is ineffective or unsafe, there is very little the agency can do to protect consumers (Barrett, 1999). Previously when the FDA had a health or safety question about a food product, the burden of proof rested on the shoulders of manufacturers to prove it was safe. Now the FDA must prove a product is dangerous before the product can be taken off the shelves. However, this process can often lead to a lengthy and expensive investigation, hindering the organization’s efforts and often leaving consumers at risk. For example, the diet pill Metabolife contains ephedrine group alkaloids in the form of herbal extracts, and may cause serious adverse health effects such as seizures, hallucinations, headaches, anxiety, hypertension and heart irregularities (Barrett, 1999). However, the product still remains on shelves and is advertised frequently on television and in magazines.

Liquid meals such as SlimFast and other weight loss shakes are not heavily promoted by health care officials. Researchers claim liquid meals fail to sustain a person for long. The AHA believes one shake cannot replace an entire meal and still provide sufficient nutrients for the body. Liquid diets are advertised as containing many nutrients; however, companies fail to mention that those nutrients often come from synthetic substances — substances that cannot provide the body with proper nourishment. While certain brands of liquid meals claim to provide important nutrients such as vitamin
A and C, iron and calcium, the ingredients really read like this: sugar, fructose, dextrose, cornstarch, cellulose gel and other chemicals (Barrett, 1999).

Herbal teas may be soothing to the soul and viewed as a way to control hunger, but tea time can be a dangerous affair. When consumed in excess amounts, herbal teas can cause diarrhea, vomiting, nausea, stomach cramps, chronic constipation, fainting and even death, according to the FDA. In 1997, the FDA announced many “adverse event” reports, including the deaths of four young women in which dieter’s teas may have been a factor (Kurtzweil, 1997). The FDA reports that laxative-induced diarrhea does not significantly reduce the absorption of calories, mainly because laxatives target the colon and not the small intestine, where calories are stored.

The FDA believes over-the-counter diet drugs, liquid meals and herbal teas fail to take the place of a well-rounded diet that includes a variety of fruits, vegetables, grains and protein. The body requires a certain number of calories to perform routine daily functions; therefore, when it does not receive adequate fuel, fatigue and energy loss ensues.

**Why Fad Diets Don’t Work**

Despite overwhelming evidence that fad diets are ineffective and often unhealthy, consumers still flock to them in desperate attempts to lose weight. The AHA is one of many major health care organizations that has declared a war against fad diets. Such organizations believe fad diets undermine people’s health, cause physical discomfort and do not encourage healthy long-term eating patterns.
Because fad diets require drastic changes in eating patterns, consumers are not able to adhere to them for long, says the AHA. Therefore, those wishing to lose weight instantly think of going “on” a diet, which implies going “off” the diet. Consumers view diets as a temporary setback, and often return to old eating habits when their weight goal is reached. Also, fad dieters do not learn anything about a permanent plan of eating right, and instead get frustrated when weight is regained.

As a result of such poor nutrition habits, dieters can engage in an “all or nothing” behavior. With rigid food choices and high expectations, fad diets cause consumers to view food as the villain, and themselves as “good” or “bad” people for eating certain foods. Cravings, binges and guilt can surface if constant calorie-counting and an emphasis on what can and cannot be eaten occurs. With fad diets, eating is no longer enjoyable, and instead, food becomes the enemy and meal time the war zone.

Yo-yo dieting can also occur due to fad diets, and often leads to frustration and confusion for consumers. In essence, the body needs a certain number of calories each day. The food consumed is translated into fuel for the body to function and perform daily tasks. When people deprive their bodies of such fuel, the body slows down its metabolism in order to conserve energy. When this metabolic rate is lowered, the body burns less calories and instead stores fat. This process is known as yo-yo dieting, since people can gain weight on fewer calories than before (Burgess, Powers and Robbins, 1999).

In a 1995 study for the Healthy Weight Journal by Kelly Brownell and Judith Rodin, the authors tracked the prevalence of yo-yo dieting and weight gain among 332
overweight persons (Berg, 1995). The study found that the vast majority of participants fell into the yo-yo dieting category, either by losing or gaining significant amounts of weight. In a similar study, Brownell and Rodin tracked the weight of 153 middle-aged adults. The authors found that during a 6-year time span, women lost an average of 27 pounds and gained 31 pounds, while the men lost and gained an average of more than 22 pounds. Therefore, the women experienced a gain of 21% of their initial body weight, and a loss of 19%. The men experienced about a 12% weight loss and gain. These studies display the prevalence of yo-yo dieting in two separate samples of people, in which weight gain was a common occurrence (Berg, 1995).

Fad diets spur controversy mainly because of their restrictive, unrealistic guidelines. The New Zealand Medical Journal (1990) declared that fad diets play on the “gullible” public’s desire to avoid long term calorie restriction, moderate exercise and appropriate eating behavior to lose weight. The publication devised a list of guidelines consumers should use to spot — and then avoid — a fad diet.

Spotting a fad diet

Do the diet’s claims include:

--large and rapid weight loss;

--lasts only a few days;

--no exercise required.

Does the diet suggest:

--combining specific foods;

--special powders, pills and meal replacements;

--foods supplements in which no scientific evidence supports the substitutes for real food.
Although *The New Zealand Medical Journal* published these guidelines about fad diets in 1990, the guidelines still surface today. The AHA is one of many major health care organizations promoting similar guidelines in 2001, blasting fad diets for being “too restrictive” and “too misleading.” The AHA says fad diets lack solid scientific evidence to back their claims and also fail to provide ways to keep excess weight off for good. Overall, fad diets are viewed by major health organizations as just that — fads — and rarely, if ever, effectively work in the long run.

**The Key to Successful Weight Loss**

Researchers say when it comes to dieting, forget the fads and stick to the basics. In other words, eating healthy — not necessarily restrictive — is crucial. Major health organizations agree a low-fat diet filled with fruits and vegetables is essential for avoiding diseases like cancer, heart disease and stroke. For successful weight loss to occur, however, healthy eating is not the only key. Eating nutritious foods in moderation and including regular exercise into a daily schedule stands as an unbeatable combination for losing weight and keeping it off, according to the AHA.

The USDA and Health and Human Service Food Guide Pyramid is promoted as a leading component to a healthy lifestyle. The Food Guide Pyramid encourages people to eat a variety of food from all the food groups: grains, fruits, vegetables, dairy, meat/protein and fats/sweets. Eating five or more servings of vegetables and fruit each day and seven or more servings of whole grains and beans cuts down on intake of foods with animal origin — in turn cutting down on excess calories and fat. In comparison to
the Food Guide Pyramid, fad diets — with such restrictive guidelines and nutrient-deficient portions — are found to have far more negative health implications.

Americans have gotten fatter because energy expenditure has declined dramatically. Achieving weight loss is possible through regular exercise, says the AICR. Studies show that health can improve by losing as little as 10 to 20 pounds. Weight loss reduces the risk factors for diabetes and cardiovascular disease, reduces blood pressure and increases high-density lipoprotein (HDL) cholesterol, according to the U.S. Department of Health and Human Services (1999). Daily physical exercise is viewed as a part of the “manner of living,” and is considered to be as much a part of overall health and disease resistance as a healthy diet.

Exercise leads to a variety of health improvements and positive results. Exercise burns calories, prevents the loss of lean body/muscle mass, decreases abdominal fat and promotes the maintenance of weight loss (American Dietetic Association, 2001). The American College of Sports Medicine recommends physical activity of at least 20 to 30 minutes long for at least three days a week. In The New England Journal of Medicine, a year-long study of overweight men and women in which body weight losses were compared between two groups, those who dieted only and those who dieted and exercised (walking/jogging three times per week for 25 to 45 minutes), the diet-plus-exercise group experienced increased body fat loss (Burgess, Powers and Robbins, 1999).

In a 1996 study by the Journal of the American Dietetic Association, researchers used three behavioral weight loss treatment groups (diet only, exercise only, and diet plus exercise). Researchers found at the end of one year, the combination diet plus exercise
group lost the most weight. However, by the end of two years, the exercise only group
maintained their weight loss much better than the other two groups (Burgess, Powers and
Robbins, 1999). Researchers discovered exercise was easier for participants to follow
rather than a restrictive diet. Overall, studies show exercise leads to weight loss and a
healthier lifestyle, while simply chopping calories just does not cut it.

The AHA, AICR, USDA and CDC suggest the guidelines for a healthy, reliable
diet program should:
1) Allow for a safe weight loss of 1 to 2 pounds of week.
2) Use real food.
3) Promote a safe exercise program.
4) Not have restrictive calorie guidelines (no less than 1,200 per day).
5) Teach a person how to maintain lifelong behavior in staying healthy and keeping
weight off.

Quite noticeably these guidelines do not suggest popping pills or drinking shakes
for “rapid” weight loss. They do not promise a person will lose 30 or more pounds in
under two weeks. Overall, major health organizations promote these guidelines for
people desiring a healthy, long-term eating and exercise plan, two important elements fad
diets appear to lack.

So what is the best way to lose weight? Healthy eating and exercise. The AHA
says any way a person looks at it, “a healthy diet rich in fresh fruits and vegetables along
with regular physical activity can help most people manage and maintain weight loss for
both cardiovascular health and appearance.”
Summary

Obesity remains an escalating epidemic in the United States. With the Center of Disease Control and Prevention reporting that more than 60% of the population is overweight and every one in four Americans is obese, it is obvious Americans are eating more and moving less. Furthermore, the Surgeon General's office reports that more than half the population is not regularly active. Such statistics perplex major health care organizations, especially when evidence from the Surgeon General supports the fact that physical exercise significantly improves the quality of an individual's life.

Like today's figures, the obsession with thinness is not getting any smaller. With as many as almost half of all women and a quarter of all men on a diet at any given time, diets are becoming a trend embedded in our culture. However, with Americans gaining an average of 8 pounds a year, the efficacy of such diets is questioned.

Although their effectiveness is questionable, fad diets of all kinds still find themselves within easy reach of consumers. Over-the-counter diet drugs, liquid diets, herbal teas and low-carbohydrate diets are among the seemingly endless array of "quick-fix" solutions offered by diet companies. The labels and authors of such diets claim their products are safe and effective, yet major health organizations pick out their flaws, one after another.

Fad diets carry a pack of harsh opponents and a lesser amount of avid supporters. Major health organizations — the American Heart Association, United States Department of Agriculture and American Institute for Cancer Research — vehemently declare fad diets as the enemy. Labeled restrictive, misleading and unhealthy, fad diets stand as a
blockade to a healthy lifestyle, according to such organizations. Overwhelming evidence exists to support claims against the use of fad diets.

Those who choose to ride the diet roller coaster are encouraged by the AHA and others to step off and stick to the basics. Healthy eating through the USDA Food Guide Pyramid and regular physical activity are viewed as an unbeatable combination when it comes to losing weight and keeping it off. Overall, major health organizations want to target the improvement of everybody's "manner of living," and although such a major change may take more work and discipline, the results are considered equally more safe and effective.

Conclusion

Society is not getting any thinner, and as a result, the diet industry is making fat profits. Research suggests the people who benefit most from fad diets are not the consumers, but those who sell them. While obesity remains an escalating epidemic, major health organizations are declaring war against fad diet authors and companies who claim to have the "quick-fix" solution. However, studies show that, like it or not, the key to weight control is balancing calorie intake and exercise. In other words, consumers should work off the food they eat. Major health organizations such as the AHA, AICR, FDA and USDA have a bold, yet simple, message for consumers: Move more, eat less.
CHAPTER THREE
METHODOLOGY

Sample

From a pool of 336 surveys voluntarily completed by students at Ball State University in Muncie, Indiana, 289 were used for research in this project. A total of 76 males and 213 females completed a 24-itemized survey (Appendix A). Forty-seven surveys were eliminated due to age restrictions.

Criteria for participation included that the subjects had to be undergraduate students at Ball State University between the ages of 18 to 23. Permission to use human subjects was obtained from the Institutional Review Board prior to any testing or data collection (Appendix B).

Study Design

The surveys were completed and collected through various classes at Ball State University as well as during UniverCity Week on campus. A statistician statistically analyzed the surveys for percentages, frequencies and comparisons.

Instrumentation

The surveys included questions regarding demographics, exercise habits, the use of fad diets and weight loss programs and viewpoints toward fad diets.

Data Analysis

Data was analyzed statistically using percentages. Percentages and frequencies were computated.
CHAPTER FOUR

RESULTS

Subjects

Table 1 represents the age, weight and height of the male and female subjects involved in this study. As shown, of the 76 males (26%) and 213 females (74%), the mean age of the participants was 20 ± 1.39. The mean weight of the male participants was 183 pounds ± 36, with their mean height being 70.6 inches ± 3. The mean weight for the women was 141.5 pounds ± 27.71, with their mean height being 65.5 inches ± 2.9. Of the 289 participants, 99% (n=286) were single and .7% (n=2) were married.

Table 1. Mean (± SD) Age, Weight and Height for Males and Females

<table>
<thead>
<tr>
<th>Variables</th>
<th>Males (n=76)</th>
<th>Females (n=213)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20 ± 1.39</td>
<td>20 ± 1.39</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>183 ± 36</td>
<td>141.5 ± 27.71</td>
</tr>
<tr>
<td>Height (in.)</td>
<td>70.6 ± 3</td>
<td>65.5 ± 2.9</td>
</tr>
</tbody>
</table>

Most subjects described their present weight as normal, although a high percentage also said they were dissatisfied with their looks. Table 2 reveals the students’ perceptions of their present weight, their level of satisfaction toward their appearance and the history of obesity, if any, in their families. As shown, about 34.6% (n=100) of the subjects described their present weight as overweight, while 56.1% (n=162) viewed their present weight as normal. Most subjects (n=140, 49%) said they were satisfied with their looks, although 40.2% (n=115) said they were dissatisfied with their appearances. A
majority (n=205, 72.2%) of participants said they did not have a history of obesity in their family, although 27.8% (n=79) said they had a history of obesity in their family.

**Table 2. Description of Present Weight, Level of Satisfaction with Looks, and History of Obesity in Family among Students (n=289)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would describe body as obese</td>
<td>9 (3.1%)</td>
</tr>
<tr>
<td>Would describe body as overweight</td>
<td>100 (34.6%)</td>
</tr>
<tr>
<td>Would describe body as normal</td>
<td>162 (56.1%)</td>
</tr>
<tr>
<td>Would describe body as underweight</td>
<td>17 (5.9%)</td>
</tr>
<tr>
<td>Would describe body as very underweight</td>
<td>1 (0.3%)</td>
</tr>
<tr>
<td>Completely satisfied with looks</td>
<td>14 (4.9%)</td>
</tr>
<tr>
<td>Satisfied with looks</td>
<td>140 (49%)</td>
</tr>
<tr>
<td>Dissatisfied with looks</td>
<td>115 (40.2%)</td>
</tr>
<tr>
<td>Very dissatisfied with looks</td>
<td>17 (5.9%)</td>
</tr>
<tr>
<td>History of obesity in family</td>
<td>79 (27.8%)</td>
</tr>
<tr>
<td>No history of obesity in family</td>
<td>205 (72.2%)</td>
</tr>
</tbody>
</table>

This particular study revealed that a sample of college students at Ball State University are no exception to today's trend of fad diets. Some of the results were surprising, while others were expected. Overall, several of the hypotheses in this project were found to be true:

**H1= A college campus is not excluded from today's high experimentation with fad diets, and a majority of students who try a fad diet will not be happy with the results.**

The first hypothesis is supported by the fact that one-third (n=93) of the 289 students surveyed said they have tried a fad diet. Thirty-three percent is a substantial amount when considering the total number of men and women surveyed. As shown in Table 3, only 10 (11%) of the 93 students said fad diets produce results, but included the
stipulation that diets work only if done correctly. Of the 93 students who tried a fad diet, a majority said they were not happy with the results. Fifty-five percent (n=51) said fad diets fail to produce lasting results and are unhealthy, while another 15% (n=11) acknowledged that a healthy diet and exercise is the deciding factor when it comes to weight loss. “Fad diets are not only just a temporary solution, but they’re dangerous,” wrote one male student from the sample of subjects against fad diets. “It takes a lot of discipline to exercise and eat right, but that is truly the healthiest way to lose weight.” Overall, the survey results and responses indicate college students are at risk for today’s experimentation — and failures — of fad diets. One female student wrote, “I had no energy when I was trying different fad diets. My body was always craving more food, so I ended up overeating all the time.” Other reasons students cited fad diets as being negative included high expense of the diets and the varied effects they produced.

**Table 3. Prevalence of Fad Diets and Their Level of Approval by Students***

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who said fad diet worked</td>
<td>10 (13.5%)</td>
</tr>
<tr>
<td>Students who said fad diets are unhealthy</td>
<td>51 (68.9%)</td>
</tr>
<tr>
<td>Students who said healthy diet/exercise key</td>
<td>11 (14.9%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (2.7%)</td>
</tr>
</tbody>
</table>

*From a pool of 93 students who had tried fad diets, 19 did not answer this question.

**Table 4. Breakdown of Fad Diet Usage by Males and Females**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male (n=76)</th>
<th>Female (n=213)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried a fad diet</td>
<td>10 (13%)</td>
<td>83 (40%)</td>
</tr>
<tr>
<td>Have never tried a fad diet</td>
<td>66 (87%)</td>
<td>126 (60%)</td>
</tr>
</tbody>
</table>
H2=More women than men have tried fad diets.

Indeed, this study revealed that more women than men have tried fad diets (Table 4). Forty percent of the females (n=83) said they have tried a fad diet. The female percentage far outweighs that of the males, in which only 13% (n=10) said they tried a fad diet. These results suggest that college-aged females are more prone to use a quick-fix solution for weight loss, while college-aged men do not usually rely on such forms of dieting.

H3=A majority of students that try fad diets are dissatisfied with their looks.

According to the survey results, the primary reason students turn to fad diets is because they are not happy with their appearances (Table 5). The third hypothesis holds true because nearly 68% (n=63) of those who have tried a fad diet expressed a dissatisfaction with their looks. This percentage draws a stark contrast to the 65% (n=122) of students who had never tried a fad diet, but claimed they were satisfied with their appearances. In other words, more fad dieters (68%) are dissatisfied with their looks than non-fad dieters (35%).

Table 5. Comparison of Satisfaction between Fad Dieters and Non-fad Dieters

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fad dieters (n=93)</th>
<th>Non-fad dieters (n=189)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissatisfied with looks</td>
<td>63 (68%)</td>
<td>67 (35%)</td>
</tr>
<tr>
<td>Satisfied with looks</td>
<td>30 (32%)</td>
<td>122 (65%)</td>
</tr>
</tbody>
</table>

H4=Most students that try fad diets fail to exercise as part of their weight loss plan.

For a majority of the students surveyed, exercise was not included as part of weight loss plan (Table 6). A total of 21.1% (n=61) of the students said they do not exercise at all, 15.2% (n=44) said they exercise once a week for 30 minutes or more and
24.2% (n=70) said they exercise twice a week for 30 minutes or more. Only 19% (n=55) of those surveyed meet the American College of Sports Medicine recommendations, in which people are encouraged to exercise at least three days a week for 20 - 30 minutes or more. As shown in Table 7, the top three activities students engaged in were walking (n=108, 48%), weightlifting (n=98, 44%) and running (n=94, 42%). According to the Mann-Whitney test (Table 8), in which the exercise habits of fad dieters (n=93, 33%) were compared to the exercise habits of non-fad dieters (n=192, 67%), those students surveyed who were on a fad diet exercised fewer times per week for 30 minutes or more than did students who were not a fad diet (u=7,582, z=-2.10, p=.036). This particular hypothesis is supported because a majority of the students surveyed did not exercise. Rather, it appears they relied upon fad diets as their weight loss solution.

Table 6. Number of Times Per Week Students Exercise 30 Minutes or More

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=289)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No exercise at all</td>
<td>61 (21.1%)</td>
</tr>
<tr>
<td>1 day</td>
<td>44 (15.2%)</td>
</tr>
<tr>
<td>2 days</td>
<td>70 (24.2%)</td>
</tr>
<tr>
<td>3 days</td>
<td>55 (19%)</td>
</tr>
<tr>
<td>4 days</td>
<td>24 (8.3%)</td>
</tr>
<tr>
<td>5 days</td>
<td>20 (6.9%)</td>
</tr>
<tr>
<td>6 days</td>
<td>12 (4.2%)</td>
</tr>
<tr>
<td>7 days</td>
<td>2 (.7%)</td>
</tr>
<tr>
<td>10 days</td>
<td>1 (.3%)</td>
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24.2% (n=70) said they exercise twice a week for 30 minutes or more. Only 19% (n=55) of those surveyed meet the American College of Sports Medicine recommendations, in which people are encouraged to exercise at least three days a week for 20 - 30 minutes or more. As shown in Table 7, the top three activities students engaged in were walking (n=108, 48%), weightlifting (n=98, 44%) and running (n=94, 42%). According to the Mann-Whitney test (Table 8), in which the exercise habits of fad dieters (n=93, 33%) were compared to the exercise habits of non-fad dieters (n=192, 67%), those students surveyed who were on a fad diet exercised fewer times per week for 30 minutes or more than did students who were not a fad diet (u=7,582, z=-2.10, p=.036). This particular hypothesis is supported because a majority of the students surveyed did not exercise. Rather, it appears they relied upon fad diets as their weight loss solution.

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<tr>
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</tr>
<tr>
<td>6 days</td>
<td>12 (4.2%)</td>
</tr>
<tr>
<td>7 days</td>
<td>2 (.7%)</td>
</tr>
<tr>
<td>10 days</td>
<td>1 (.3%)</td>
</tr>
</tbody>
</table>
Table 7. Top Activities Students Chose for Exercise*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>108 (48%)</td>
</tr>
<tr>
<td>Weightlifting</td>
<td>98 (44%)</td>
</tr>
<tr>
<td>Running</td>
<td>94 (42%)</td>
</tr>
<tr>
<td>Aerobics</td>
<td>56 (25%)</td>
</tr>
<tr>
<td>Bike riding</td>
<td>41 (18%)</td>
</tr>
<tr>
<td>Basketball</td>
<td>32 (14%)</td>
</tr>
</tbody>
</table>

*Subjects were allowed to choose more than one answer

H5=A majority of students that try a fad diet do not stay on it for long.

Whether due to their side effects or unsuccessfulness, fad diets were not used for long by the students (Table 8). A little over 58% (n=54) of those who had tried a fad diet said they stayed on the diet for one month or less. Also, 34.4% (n=32) of those who tried a fad diet said they stayed on the diet for three months or less. Therefore, a combined 92.5% (n=86) of those surveyed did not stay on a fad diet for a substantial amount of time. These results suggest that among this sample of students, fad diets fail to promote long-term eating patterns and are indeed not a permanent plan for healthy weight loss.

“You always gain the weight back from a fad diet,” wrote one female student who was representative of many viewpoints expressed in the surveys. “They never work in the long run.”

Table 8. Length of Time Students Stayed on a Fad Diet

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=93)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month or less</td>
<td>54 (58.1%)</td>
</tr>
<tr>
<td>3 months or less</td>
<td>32 (34.4%)</td>
</tr>
<tr>
<td>More than 3 months</td>
<td>7 (7.5%)</td>
</tr>
</tbody>
</table>
A majority of students that try fad diets will experience no change in weight, or those who experience weight loss will eventually gain the weight back.

Based on the survey, weight gain following the use of a fad diet proved common (Table 9). Nearly 43% (n=37) of those surveyed said although they may have initially lost some weight through the fad diet, they eventually gained it back. Another 36.8% (n=32) said they experienced no change in their weight. Therefore, a total of 80% (n=69) of those surveyed did not achieve their desired results from the use of fad diets. These numbers indicate that among this sample of college students, fad diets were not effective in keeping weight off, or furthermore, were not effective at all.

Table 9. Results of Longest Fad Diet Tried by Students*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=87)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lost weight and kept it off</td>
<td>18 (20.7%)</td>
</tr>
<tr>
<td>Lost weight, but gained it back</td>
<td>37 (42.5%)</td>
</tr>
<tr>
<td>No change in weight</td>
<td>32 (36.8%)</td>
</tr>
</tbody>
</table>

*From a pool of 93 students who had tried fad diets, 6 did not answer this question.

**Most Commonly Used Fad Diets and Their Effects**

More than half the students surveyed had tried fad diets in the form of shakes, pills or appetite suppressants. Table 10 shows the most commonly used fad diets used by students. According to the survey results, 46% (n=42) of the students used SlimFast, while 66% (n=60) used pills or appetite suppressants. Therefore, a majority of those surveyed turned to diet shakes and over-the-counter drugs in an attempt to cure their weight loss woes. The low-carbohydrate, high-protein diets were not as popular, but still prevalent, among the students surveyed. Twenty-one percent (n=19) said they had tried the Dr. Atkins diet. However, only 3.3% (n=3) said they had tried The Zone Diet.
Table 10. Most Commonly Used Fad Diets among Students*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SlimFast</td>
<td>42 (46%)</td>
</tr>
<tr>
<td>Pills or appetite suppressants</td>
<td>60 (66%)</td>
</tr>
<tr>
<td>Dr. Atkins Diet</td>
<td>19 (21%)</td>
</tr>
<tr>
<td>Other</td>
<td>17 (18%)</td>
</tr>
<tr>
<td>Shakes or energy bars</td>
<td>15 (17%)</td>
</tr>
<tr>
<td>The Zone Diet</td>
<td>3 (3.3%)</td>
</tr>
</tbody>
</table>

*Subjects were allowed to choose more than one answer.

Among those students who had tried fad diets, vomiting, diarrhea and irritability were cited as common side effects (Table 11). Nearly 22% (n=20) said they experienced irritability, 9.7% (n=9) said the fad diet caused them to have diarrhea and 3.2% (n=3) said they suffered periods of vomiting. Also, another 22.6% (n=21) said they experienced some other type of side effect from the fad diet. The results indicate that, for many individuals, fad diets do not come without harm.

Table 11. Side Effects Students Experienced from Fad Diets

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=93)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritability</td>
<td>20 (21.5%)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>9 (9.7%)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>3 (3.2%)</td>
</tr>
<tr>
<td>Other side effect</td>
<td>21 (22.6%)</td>
</tr>
<tr>
<td>No side effect</td>
<td>40 (43%)</td>
</tr>
</tbody>
</table>

Obsession with Thinness

While college students are no exception to today’s fad diet trend, they are also no exception to today’s trend of weight loss obsession. As shown in Table 12, more than half of the 289 students (n=167, 59%) said they eat meals only once or twice a day.
Furthermore, this sample of students cited one or several methods they have used to hold back hunger in an attempt to lose weight (Table 13). Of the entire sample surveyed, 61.3% (n=57) said they skipped meals, 47.3% (n=44) said they ate a low-calorie diet, 34.4% (n=32) said they chewed gum and 30.1% (n=28) said they smoke. Another 12.9% (n=12) said they vomited to lose weight. Such results are frightening and suggest students are relying upon unhealthy — and often unsuccessful — ways of improving their appearances.

Eating disorders was not prevalent among this particular sample of students who tried fad diets (Table 14). About 6% said they suffered from an eating disorder such as anorexia (n=4, 1.4%), bulimia (n=1, 0.4%) or binge/compulsive eating (n=11, 3.9%). More than 8% (n=24) said they suffered from some other type of restrictive eating habit. Therefore, although an obsession with thinness exists among this sample college students, eating disorders do not appear to be as prevalent a problem.

The reasons for which students desired to lose weight, however, are disturbing. Table 15 shows the reasons students wanted to lose weight. Seven percent (n=6) of those surveyed said they wanted to lose weight for reasons such as health or fitness. A startling 86.5% (n=77) said they wanted to lose weight so they would look better. These results reflect today's emphasis on looks rather than improved health and fitness, which should ultimately take center stage.
Table 12. How Many Meals Students Had Eaten Per Day*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=283)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or 2 meals per day</td>
<td>167 (59%)</td>
</tr>
<tr>
<td>3 or more meals per day</td>
<td>112 (39.6%)</td>
</tr>
<tr>
<td>No meals, just snacks</td>
<td>4 (1.4%)</td>
</tr>
</tbody>
</table>

*From a pool of 289 students who had tried fad diets, 6 did not answer this question.

Table 13. Methods Students Used to Lose Weight or Stifle Hunger*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skipped eating to lose weight</td>
<td>57 (61.3%)</td>
</tr>
<tr>
<td>Ate a low-calorie diet to lose weight</td>
<td>44 (47.3%)</td>
</tr>
<tr>
<td>Chewed gum to hold back hunger</td>
<td>32 (34.4%)</td>
</tr>
<tr>
<td>Smoked to hold back hunger</td>
<td>28 (30.1%)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>12 (12.9%)</td>
</tr>
<tr>
<td>Vegetarianism</td>
<td>11 (11.8%)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (6.5%)</td>
</tr>
<tr>
<td>Took laxatives</td>
<td>5 (5.4%)</td>
</tr>
</tbody>
</table>

*Subjects were allowed to choose more than one answer

Table 14. Prevalence of Eating Disorders among Students*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=285)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anorexia</td>
<td>4 (1.4%)</td>
</tr>
<tr>
<td>Bulimia</td>
<td>1 (0.4%)</td>
</tr>
<tr>
<td>Binge/Compulsive Eating</td>
<td>11 (3.9%)</td>
</tr>
<tr>
<td>Other</td>
<td>24 (8.4%)</td>
</tr>
<tr>
<td>No eating disorder</td>
<td>245 (85.9%)</td>
</tr>
</tbody>
</table>

*From a pool of 289 students who had tried fad diets, 4 did not answer this question.
Table 15. Primary Reason Students Wanted to Lose Weight*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (n=89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve appearance</td>
<td>77 (86.5%)</td>
</tr>
<tr>
<td>To find a significant other</td>
<td>3 (3.4%)</td>
</tr>
<tr>
<td>To please somebody else</td>
<td>1 (1.1%)</td>
</tr>
<tr>
<td>Weight was affecting daily activities</td>
<td>2 (2.2%)</td>
</tr>
<tr>
<td>Other reasons, such as health</td>
<td>6 (7%)</td>
</tr>
</tbody>
</table>

*From a pool of 93 students who had tried fad diets, 4 did not answer this question.

The Cost Factor

Many students in this survey found out that fad diets do not come easy, or cheap. The average amount of money spent on fad diet products was $100. To a college student, $100 is a lot of money. One male student said he even spent more than $1,000. However, when it comes to looking good and in turn feeling good, students were willing to spend a lot of cash. Some learned the hard way that spending more money did not necessarily mean achieving their desired looks. One female student wrote, “I spent over $500 on weight loss products, but I only made myself sick. And I still wasn’t happy with how I looked.”
CHAPTER FIVE
DISCUSSION

College Students and Their Habits Compared to Other Studies

The purpose of this study was to determine the prevalence of fad diets among college students, as well as their exercise and eating habits. Since major health care organizations such as the American Heart Association, American Dietetic Association and American Institute for Cancer Research proclaim fad diets are unhealthy, this study sheds light on the potential use — and risks — of fad diets in a college atmosphere. Knowledge about the frequency of fad diet usage is important since the risks are widely considered dangerous. Because lifestyle decisions and habits are formed early in a person’s life, male and female college students were considered an ideal sample for this study.

A survey was used to determine the frequency of fad diet usage among male and female college students. The survey results, unfortunately, suggest this sample of students are falling into many of the same categorizations as the rest of today’s weight-gaining society. Overall, it appears the students would rather skip meals, avoid exercise and turn to fad diets for weight loss. Based on the results, this particular sample of college students is no exception to today’s high experimentation with “quick-fix” weight loss diets and lack of participation in physical activity.

Findings of the recent research were compared with other similar studies. In a 2000 study by the West Virginia School of Medicine, telephone-survey results were
compiled from 2,769 men and 4,490 women (Gordon, 2000). The study was geared to assess the quantity and quality of physical activity among those individuals trying to lose weight. The study revealed that half (49.6%) of the individuals trying to lose weight did not participate in any physical activity. Also, only 15% of the respondents trying to lose weight reported exercising regularly. The study found that while certain individuals trying to lose weight were more likely to engage in regular exercise, most had not adopted regular physical activity as part of their weight loss regimen.

Overall, the West Virginia study draws a correlation to this current study of college students because the path to reaching a thinner figure often excluded healthy eating habits and exercise among both samples. In this current study, students relied upon skipping meals, smoking, chewing gum or vomiting as ways to lose weight or stifle hunger. Furthermore, a whopping 60% said they only exercised two times or less a week (21.1% do not exercise; 15.2% once a week; 24.2% twice a week). Only 19% (n=55) of the students surveyed said they exercised three times a week for 30 minutes or more — the minimum number of days the American College of Sports Medicine recommends for a healthy lifestyle. A majority of the students surveyed in both studies, therefore, do not regularly incorporate exercise into their schedule.

As in this current study, results from the National College Health Risk Behavior Survey (1995) also show that the use of diet pills, vomiting and laxatives for weight control was more common among females than males (Lowry, 2000). The study included a sample of 4,609 U.S. undergraduate college students, in which physical activity, food choice and weight management practices were examined. About 15% of
the females said they had used diet pills, vomiting or laxatives as a way to lose weight, while only 5% of the males said they relied upon such weight loss methods. Similarly, in this current study, only 13% (n=10) of male students said they had tried a fad diet, while 40% (n=83) of female students said they had tried a fad diet. Therefore, both studies suggest that fad dieting is more prevalent among females than males.

Although students are not excluded from today’s fad diet trends, they are among the many people who experience few positive effects from the diet, and as a result, back out while they can. A total of 92.5% (n=86) of the students who tried fad diets said they stayed on the diet for only three months or less, with 58.1% (n=54) staying on the diet for only a month or less. Students cited the following reasons for their short stint with fad diets: “They’re dangerous,” one female student wrote. Another female student wrote, “It just wasn’t a healthy way to lose weight. I gained it all back, and then some.” In essence, this survey succeeded at supporting this project’s hypotheses by showing that fad diets often fail.

Once again, this evidence suggests students seek a quick-fix solution to drop excess pounds and feel better about themselves. In this survey sample, a higher percentage of fad dieters were dissatisfied with their appearance than were non-fad dieters. Also, instead of worrying about health and fitness, most students focused on losing weight to improve their appearances.

The obsession with thinness from this sample of a college campus is representative of what has existed in the rest of the country. A 1993 study by the Healthy Weight Journal revealed that the fear of fatness, restricted eating and binge eating was so
common among girls by age 10 that it almost was considered the norm for middle-class, preadolescent girls (Berg, 1995). The California study involved 494 girls, age 9 - 18, and found that eating disorders were prevalent among 30 - 46% of 9-year-olds, and 46 - 81% of 10-year-olds, increasing steadily with age. Purging was highest at age 15 (11%).

Similar image problems were found in a different study (1993) involving fifth graders (Berg, 1995). University of South Carolina medical researchers found 40% of the students felt they were too fat or wanted to lose weight through a diet, even though 80% were not overweight. In this current study, 68% (n=63) of students said they were dissatisfied with their looks. Also, 86.5% (n=77) said they relied upon a fad diet to improve their appearance. Overall, these studies demonstrate the growing problems with self-perception — which appear to begin at a young age — and the potentially dangerous methods individuals rely upon to cure their dieting woes.

As indicated by survey results in this study, the quest for thinness did not come without harm or cost. Vomiting, diarrhea and irritability surfaced as side effects for 60% (n=53) of those who had tried fad diets. Also, students who had tried fad diets spent an average of $100. For many, losing weight entailed losing money and gaining discomfort.

Despite the large number of students who experimented with fad diets, the large number (n=86, 92.5%) who listened to their bodies and discontinued fad diets is encouraging. Although fad diets appear to be prevalent on a college campus, they do not surface as successful long-term weight loss solutions. By dropping fad diets and picking up improved eating and exercise habits, students just may end up with the healthy bodies and enhanced self-esteem they crave.
CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The investigator of this study believes that a college campus such as Ball State University is not excluded from today’s high experimentation with fad diets. As seen in the discussion, college students are no different than the rest of the country when considering factors such as lack of exercise, poor nutrition habits and low self-perception levels. Not surprisingly, a majority of the students that had tried fad diets were dissatisfied with their looks. However, students as well as the rest of society need to seek out healthier ways to shed excess weight and improve their self-esteem.

As predicted, most students that had tried a fad diet gained the weight back. The investigator of this study believes individuals would save a lot of money and hassle if they would stick to the basics of healthy eating and regular physical activity in their everyday schedules. Bogus claims by fad diet companies cannot hold a candle to the scientifically-proven studies that show proper nutrition and regular exercise yields weight loss and an overall healthier body.
Recommendations

For future research with college students and fad dieting, the following recommendations would be made. It would be beneficial to have a larger sample size from male students, allowing a broader look at their habits and preferences.

Also, more information about the ethnicity of subjects may be beneficial. A study involving the comparison of the use of fad diets between individuals of different ethnicities may be interesting, perhaps reflecting upon the habits they formed in the environments in which they were raised.

Another aspect of research that should follow is the long-term efficacy of fad diets among those who, at the time of the survey, said the fad diet they tried was successful. Further investigation may reveal that the fad diets did indeed work in the long run, or that they failed to produce lasting results. Also, blood work could be performed on individuals who tried various fad diets to determine if any harm or side effects resulted from their use of the diet.

Finally, research on the reasons for such high dissatisfaction among students toward their appearances could be an area of interest. Perhaps by determining why students feel the way they do about the look — by considering factors such as outside influences, how they were raised, what expectations they have — could help better understand what propels them to turn to "quick-fix" solutions.
INSTITUTIONAL REVIEW BOARD

TO: Andrea Pedtke
2025 W. Jackson St.
Muncie, IN 47303

FROM: Daniel Goffman, Chair
Institutional Review Board

DATE: October 19, 2000

RE: Human Subjects Protocol I.D. -IRB #01-84

The Institutional Review Board has recently approved your "The Prevalence of Fad Diets Among College Students" as submitted as an exempt study. Such approval is in force from October 19, 2000 to October 18, 2001.

Editorial Note:

This research project has been reviewed as an exempt study. As such, the use of a Consent Form is not required. In this case, not using the Consent Form provides greater protection of the subjects anonymity. Therefore, it is suggested that the researcher consider not using the Consent Form.

It is the responsibility of the P.I. and/or faculty supervisor to inform the IRB:

- when the project is completed, or
- if the project is to be extended beyond the approved end date,
- if the project is modified,
- if the project encounters problems,
- if the project is discontinued.

Any of the above notifications should be addressed in writing to the Institutional Review Board, c/o the Office of Academic Research & Sponsored Programs (2100 Riverside Avenue). Please reference the above identification number in any communication to the IRB regarding this project. Be sure to allow sufficient time for extended approvals.
Appendix B

*FAD DIET SURVEY*

Sex: Male____ Female____

Age: ______

1. What is your marital status?
   _____single _____ married _____divorced

2. Your present weight _____ lbs. __ft. __in.

3. Describe your present weight (check one)
   (i.) ____ obese (iv.) ____ underweight
   (ii.) ____ overweight (v.) ____ very underweight
   (iii.) ____ normal

4. Are you completely satisfied with the way you look at this weight? (check one)
   (i.) ____ completely satisfied (iii.) ____ dissatisfied
   (ii.) ____ satisfied (iv.) ____ very dissatisfied

5. Do you have a history of obesity in your family? Yes____ No____.

6. How many times a week do you exercise 30 minutes or more? __________

7. In reference to the above question, please list the **top three** activities that you most frequently do.
   (i.) ____________
   (ii.) ____________
   (iii.) ____________

8. How many meals do you eat a day?
   (i.) ____ 3 or more   (ii.) ____ 1 or 2   (iii.) ____ no meals, just snacks
9. Do you have restrictive eating habits? If so, please check all that you have.

(i.) ___ anorexia    (iii.) ___ compulsive eating
(ii.) ___ bulimia     (iv.) ___ other

10. Do you eat reduced fat or fat free foods? Yes ___ No ___.

11. Which, if any, of the following weight loss programs have you tried? Check all that apply.

(i.) ___ Weight Watchers    (iii.) ___ LA Weight Loss
(ii.) ___ Jenny Craig       (iv.) ___ other (please specify)

12. What is the longest you have stayed on any of the above-mentioned programs in question #11?

(i.) ___ less than 1 week    (iv.) ___ 13-26 weeks (6 months)
(ii.) ___ 1-4 weeks (1 month) (v.) ___ more than 26 weeks
(iii.) ___ 5-12 weeks (3 months)

13. What was the result of the longest program?

(i.) ___ lost weight and kept it off  (iii.) ___ no change
(ii.) ___ lost weight, but gained it back

14. If you tried a weight loss program, what made you decide to try it?

(i.) ___ advertisements    (iii.) ___ cost
(ii.) ___ desire to lose weight quickly  (iv.) ___ other (please specify)

15. Did you have to stop the weight loss program before it was over? Yes ___ No ___.
If so, why? ________________________________________________________

-more-
16. Have you ever tried a fad diet?

Yes____(continue with survey)  No____(you are finished with the survey)

17. In reference to question #16, if you have tried a fad diet, please put a check next to the one(s) you have tried.

(i.)____ SlimFast  (v.)____ Pills or appetite suppressants

(ii.)____ Dr. Atkins Diet  (vi.)____ Zone Diet

(iii.)____ Sugar Busters  (vii.)____ Metabolife

(iv.) Shakes or energy bars

18. What is the longest you have stayed on any of the above-mentioned diets in question #17?

(i.)____ less than 1 week  (iv.)____ 13-26 weeks (6 months)

(ii.)____ 1-4 weeks (1 month)  (v.)____ more than 26 weeks

(iii.)____ 5-12 weeks (3 months)

19. What was the result of the longest fad diet you tried?

(i.)____ lost weight and kept it off  (iii.)____ no change

(ii.)____ lost weight, but gained it back

20. Did you experience any side effects? If so, please check which ones.

(i.)____ vomiting  (iv.)____ heart problems

(ii.)____ diarrhea  (v.)____ other

(iii.)____ irritability

-more-
21. What was the primary reason you wanted to lose weight?

(i.) _____ To improve appearance  (iv.) _____ Your weight affects your daily activities.

(ii.) _____ To find a significant other  (v.) ____________________________ other (please specify)

(iii.) _____ To please somebody

22. If applicable, please check all that you have done to lose weight or hold back hunger.

(i.) _____ skip meals  (v.) _____ vomiting

(ii.) _____ smoke  (vi.) _____ low-calorie diet

(iii.) _____ vegetarianism  (vii.) _____ chew gum

(iv.) _____ take laxatives  (viii.) ____________________________ other (please specify)

23. How much total have you spent on weight loss products or programs? ________.

24. Would you recommend a fad diet or weight loss program to somebody trying to lose weight? Yes _____ No _____.

Why or why not? ________________________________________________________________

-end-
WORKS CITED


