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Evaluation of a French version of "A Preventative Curriculum for Anorexia Nervosa and Bulimia" in French schools in southwestern Ontario.

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Evaluation of A French Version of "A Preventive Curriculum for Anorexia Nervosa and Bulimia" in french schools in Southwestern Ontario.

by

Susan Marie Rollinson

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Abstract

This thesis was undertaken to determine the effectiveness of the French version of A Preventive Curriculum for Anorexia Nervosa and Bulimia (Un plan d'etudes pour la prevention de l'anorexie et la boulimie). The purpose on this study was to determine whether the curriculum produced a change in students' knowledge, attitudes and behavior when a unit was taught over a five day period.

Two units of the curriculum were taught, one to grade school students and one to high school students. Before the units were taught, the students were given a pretest for knowledge, attitudes and behavior. The units were taught and the students were then given a posttest which was exactly the same as the pretest.

It was found that there was a significant increase in knowledge as a result of exposure to these units of the curriculum. There was no change in students' attitudes and behavior.

Teachers were asked to give their reactions to the curriculum. They noted that after exposure to the curriculum, students better understood the importance of healthy eating and were less hung up on dangerous dieting. Teachers found the curriculum to be a valuable resource.

Dedication

This thesis is dedicated to Andrew and to Patti, whose genuine love and support made it all possible.

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CHAPTER 1

INTRODUCTION

Eating disorders are quickly approaching epidemic proportions in Canada and many active, competent, and young individuals are becoming afflicted. This has been attributed to socio-cultural factors such as the exploitation of thinness by the media and the glorification of thinness by youth (Marano, 1991), changing social roles of women and societal pressure to lose weight (Sheinin, 1990; Siegler, 1991), and the present emphasis placed on fitness and sport (Moriarty and Moriarty, 1986; Sheinin, 1990). It has also been attributed to the biological factor of puberty, a difficult stage in the growth and maturational development of a child as he/she approaches adolescence (Abraham and LLewellyn-Jones,1989; Shore, 1987). Other factors Shore (1987) believed to contribute to the development of eating disorders include negative psychological features such as body dissatisfaction, low self-esteem, self-depreciation, feelings of insecurity and ineffectiveness, overconforming and interpersonal distrust, lack of assertiveness, and fear of sexual development. Brown (1990) attributes this fear of sexual development to the high incidence of sexual abuse which is seen in eating disordered individuals. Brown states that sexual abuse "...has been clinically observed over and over again among some women who are anorexic or bulimic" (p. 3).

The overwhelming majority of individuals suffering from

eating disorders are female but these syndromes also occur in males. Anorexia nervosa and bulimia span all races, languages, social classes, and cultures in the western world (Abraham and Llewellyn-Jones, 1989; Sheinin, 1990). The incidence of these disorders is steadily increasing in the adolescent and young adult populations, and is being seen more and more in young children as noted by Sheinin (1990):

> ...almost 90% of women in Canada have some degree of body image dissatisfaction. Over 80% have dieted by age 18, and 40% of nine-year old girls have already dieted. Little girls as young as three, four, and five, are expressing a wish to diet (p.1).

In recognition of the seriousness of this problem, a group of concerned health professionals in Essex County developed a preventive curriculum for eating disorders in 1986. There were two components - an assessment tool, and an accompanying curriculum.

The first component investigated the prevalence of attitudes and behaviors characteristic of eating disorders in English students (Shore, 1987) and in French students (Rollinson, 1994) from grades 6-12 in Essex County. Results of the scores on the Eating Disorders Inventory indicated that males and females at all age groups scored high on the Drive for Thinness and Body Dissatisfaction subscales. It was concluded that even at ages 11 and 12 females are experiencing dissatisfaction with their body shape and are driven towards thinness. This dissatisfaction

increased as students got older. Prepubertal males were more dissatisfied with their body shape than were older males. High school females also scored high on the bulimia subscale. On the Eating Disorder Inventory, 5.5% of the students scored at or above the norms for anorexia nervosa and 32% scored at or above the norms on the body dissatisfaction subscale. This establishes a need for preventive education with this sample.

A curriculum was designed and tested for English speaking students (Carney, 1986). A review of literature indicated that the problem was also prevalent in the French culture. Francophones place great value on food and bodily appearance, to the extent that pathogenic weight-control behavior may result. Chatelet (1977), Descamps (1986), Chatelet (1986), and Pynson (1989) provide vivid descriptions illustrating the powerful influence French society places on its members as it dictates the desired ideal body size and shape. Francophones experience societal pressures to reduce weight to achieve a degree of thinness that is both abnormal and unhealthy. As in industrialized, western nations in general, and North America in particular, francophones experience dissatisfaction with their bodies, low self-esteem, abuse of laxatives, diuretics, exercise abuse (or purging), and other characteristics commonly observed in victims of eating disorders. Chatelet (1989), through personal interviews with francophone individuals suffering from anorexia nervosa and bulimia, discussed the problems surrounding eating behavior and attitudes towards weight in French youth. Steiger et

al. (1990) conducted a study in Canada which included 395 francophone and 529 anglophone high school students, aged 12-17, in which they found evidence of polysymptomatic factors similar to those seen in sufferers of eating disorders.

It appears therefore that there is also a problem among french students and a French curriculum was developed. This study evaluates the effectiveness of this curriculum. It will be of particular significance to the community, schools, universities, and the field of athletics. It emphasizes the need to determine the extent of eating disorders in French schools, and to provide an effective preventive education program. It is also the first study to assess French students, in the province of Ontario, in terms of preventive education and eating disorders.

Upon successful completion, this study will serve as a base for recommendations to health professionals, community groups, schools, and organizations in sport and fitness which serve the French-Canadian and Franco-Ontarian populations.

The Purpose

The purpose of this study is to pilot test the French version of A Preventive Curriculum for Anorexia Nervosa and Bulimia, namely, Un plan d'etudes pour la prevention de l'anorexie nerveuse et la boulimie (Carney, 1986) in an attempt to evaluate its efficacy as an educational resource. This curriculum, in its English form, has been determined to be a valuable resource for students of English schools in Southwestern Ontario. An evaluation of the French form of the curriculum as a

viable resource for French schools has not been conducted.

The Problem

Will there be changes in grade school and high school students' knowledge, attitudes, and behavior as a result of their exposure to the curriculum?

Sub-problems

1. Will there be an increase in knowledge, as a result of exposure to the curriculum, for (a) grade school students (b) grade school males (c) grade school females?
2. Will there be an increase in knowledge for (a) high school students (b) high school males (c) high school females?
3. Will there be a change in attitudes for (a) grade school students (b) grade school males (c) grade school females?
4. Will there be a change in attitudes for (a) high school students (b)high school males (c) high school females?
5. Will there be a change in behavior for (a) grade school students (b) grade school males (c) grade school females?
6. Will there be a change in behavior for (a) high school students (b) high school males (c) high school females?

Hypotheses

This curriculum was designed to help students gain knowledge and understanding of the issues surrounding eating disorders, in an attempt to curb the incidence of such disorders. It was designed to promote healthy attitudes towards weight related factors as well as to promote healthy eating patterns. This

curriculum was developed in response to teachers' concerns that a large number of students held negative attitudes towards the need for an appropriate level of body fat, which led to unhealthy and life-threatening practices.

Based on the scores (of subjects in the experimental and control groups) revealed by the pre and post tests, and the exposure of the experimental group to the curriculum, the following hypotheses were investigated:

In the experimental group, after exposure to the curriculum:

1) There will be a significant increase in knowledge for (a) grade school students (b) grade school males (c) grade school females.

(2) There will be no significant change in attitudes towards eating disorders (and weight related factors) for (a) grade school students (b) grade school males (c) grade school females.

(3) There will be no significant change in diet and exercise behaviors for (a) grade school students (b) grade school males (c) grade school females.

(4) There will be a significant increase in knowledge for (a) high school students (b) high school males (c) high school females.

(5) There will be no significant change in attitudes towards eating disorders for (a) high school students (b) high school males (c) high school females.

(6) There will be no significant change in diet and fitness

behaviors for (a) high school students (b) high school males (c) high school females.

Delimitations

1. This study is only being conducted in schools in Windsor and the surrounding rural areas.

2. This study only accounts for short-term effectiveness of the curriculum, as it will be introduced and taught in approximately five teaching days.

Limitations

1. Not all of the students participating in this study are francophone. Many of the students attending the French schools are anglophone students who are experiencing education in a French immersion setting.

2. These schools are located in a predominantly English area in which they are influenced, to a large extent, by English socio-cultural factors which may differ from that of a purely French setting.

3. There are only six French schools in Windsor and surrounding rural counties that suit the present study, which results in a relatively small sample size.

4. There is a lack of appropriate French audio-visual resources such as videotapes, films, slides, and cassettes which could be used to supplement teachers' instruction.

Definition of Terms

Anorexia Nervosa is defined by Garfinkel and Garner (1982) as:

> ...the relentless pursuit of a thin body size, combined with a fear of weight gain

> despite ever increasing emaciation. The anorexic begins dieting to lose weight, but over a period of time, will drastically restrict her diet to approximately 600-800 calories per day (p.3).

Bulimia is defined by Tobias (1988) as:

> ...powerful and intractable urges to binge - to ingest large amounts of food in uncontrollable fashion - and then, for all bulimics have a morbid fear of becoming fat, to avoid fattening effects of ingestion by vomiting, purging, or dieting (p.174).

Eating Disorders are those illnesses which are characterized by abnormal, unhealthy, and often life-threatening dietary practices. The eating disorders referred to in this study are specifically anorexia nervosa and bulimia.

Knowledge is the cognitive awareness and understanding of appropriate information (Shore, 1987) which, in this study, shall concern the issues surrounding eating disorders.

Attitudes are thoughts, values, beliefs, perceptions and wishes (Shore, 1987) which, in this study, shall refer to those regarding diet, slimness, eating, and bodily appearance.

Behaviors are an individual's actions, or practices (Shore, 1987) and shall, in this study, refer specifically to those activities which place individuals at risk for developing eating disorders. Such behaviors will include those manifested in a drive for thinness (dieting, bingeing and purging, overexercising), those manifested by body size dissatisfaction, (which also includes reliance on unhealthy fad diets), and those driven by the individual's pursuit of perfection (in performance at school, in the community, in sport, etc.). Behaviors, in this study, shall

also refer to those activities reflected by negative thought patterns about oneself such as lack of trust, feelings of insecurity and ineffectiveness, lack of self-esteem, and lack of assertiveness.

Socio-cultural Influences 1 and Socio-cultural Influences 2 are questionnaires containing items related to the socio-cultural influences of society and their impact on the development of eating disorders in today's youth. Such questions include what role food plays in your family, as well as general questions like whether things have to be done perfectly to be satisfactory, and what kinds of things frustrate and irritate you.

CHAPTER 2

REVIEW OF LITERATURE

Early Medical Description

Anorexia nervosa and bulimia are two eating disorders which are characterized by a preoccupation with food and dieting, and by an irrational fear of becoming fat, or even of normal weight. Evidence of these disorders dates back to the early Greeks, Romans, and Spartans, who held quite negative attitudes towards fat. The Greeks were supposed to have known a drug that allowed them to eat all they wanted, yet remain thin; Roman ladies 'suffered to keep as thin as reeds'; and Socrates, an early Spartan, 'danced every morning to keep his figure'(Vincent, 1981; Melville, 1983).

Early English physicians such as Morton in 1684 (Melville, 1983), Whytt in 1767 and Gull in 1873 (Wright, 1988) have made valuable contributions in identifying and reporting early cases of anorexia nervosa. They were the first physicians to document such cases. During the same era, a number of French physicians, (Lasegue, Huchard, de la Tourette, and Gaukler) independently made additional contributions. They included, in their case reports, psychological and physical features exhibited by patients with anorexia nervosa, significant familial influence on the course of the condition, and the presence of hunger, which earlier physicians believed to be absent, that accompanied the distorted image about food and their bodies (Palmer, 1981; Vincent, 1981; Shore, 1987; Wright, 1988).

The preferred female body shape has shifted in North America throughout the twentieth century. For example, in the 1920's a

lean, angular, and flat-chested look became the symbol of attractiveness (Vincent, 1981). With the popularity of Marilyn Monroe in the 1950's, the norm became a heavier, more rotund figure. Twiggy, a well-known model in the 1960's, was instrumental in transforming the preferred image or appearance once again:

> So when Twiggy hit the scene in the mid-sixties (5'7", 92 lbs in her prime), exemplifying for adolescents throughout the world what they might aspire to look like when they "grew up," she represented merely another variant of body overhauling in conformance to ever-changing body ideals (Vincent, 1981, p.15).

The weight watchers movement followed, beginning and flourishing in the 1970's. The parents and grandparents of a large portion of the present generation of youth came under the influence of this movement.

Eating Disorders Today

The anorexic patient herself is thinner than the previous generation of patients (Wolfe, 1991). In the past twenty years, the incidence of anorexia nervosa and bulimia, reported predominantly within the female population, has been increasing at an alarming rate (Garfinkel and Goldbloom, 1988; Canadian Medical Association, 1989; Nagel and Jones, 1991). Every child growing up in today's society is potentially at risk of developing an eating disorder. As Valette (1988) notes:

> ... by the time they reach their teens, young girls have deeply internalized the belief that fat is not beautiful and that beauty means approval in the eyes of males. Young boys feel a need to appear fit and strong to be admired by both girls and boys. Few young teens feel secure enough to risk rejection by their schoolmates (p.14).

As a result, overweight, and even normal weight children are under extreme pressure to become thinner in order to avoid daily humiliation by their peers. Average weight children, while observing the reaction of present day society to overweight children, attempt to ultimately avoid weight gain even though it is a natural part of their adolescent development. Underweight children wish to remain that way. McSherry (1984) and Leichner et al. (1986) support this view that in today's school aged population, weight is assigned a high priority.

Eating disorders are spreading rapidly across North America. Each year, according to Wolfe (1991):

> ...150,000 American women die of anorexia. If so, every twelve months there are 17,024 deaths in the United States alone [more] than the total number of deaths from AIDS tabulated by the World Health Organization in 177 countries and territories from the beginning of the epidemic until the end of 1988; if so, more die of anorexia in the United States every year than died in ten years of civil war in Beirut (p.182).

The disease is deadly. Wolfe (1991, p.183) states that "forty to fifty percent of anorexics never completely recover, a worse rate of recovery from starvation than the 66 percent recovery rate for famine victims hospitalized in the war-torn Netherlands in 1944-45." However, the fact that up to 50 per cent do actually recover is a hopeful sign for those affected by these diseases.

Epidemiology

Eating disorders are approaching epidemic proportions and growing numbers of Canadian youth are becoming afflicted. Although these disorders can strike anyone at any age, the onset

is more prominent during adolescence. Approximately 90-95% of the sufferers are female between the ages of 12 and 25 years (Garner et al., 1983; McSherry, 1984). There is, however, a growing incidence in women over age 25. Wolfe (1991, p.185) states that "... 53 percent of high school girls are unhappy with their bodies by age thirteen and by age eighteen, 78 percent are dissatisfied." The prevalence of eating disorders in the male population is also increasing (Canadian Medical Association, 1989).

It has been suggested by Saunders (1985), that 10% of school age children, 15% of adolescents, and 30% of adults are bulimic. Leichner et al. (1986) stated that the prevalence of bulimia may be increasing in the school age and young adult populations in North America.

The incidence of anorexia nervosa is estimated to be one in 100 among high school girls in a serious form, and five in 100 in a milder form, with a growing trend towards the presence of this disease in 12 year olds (Canadian Medical Association, 1989).

According to Fish (1988), 90% of women overestimate their body size by an average of 25%, and 40% of women view some body parts as being 50% larger than they really are. Fish (1988) reported that 39% of 12 year old girls and 53.2% of 15 year old girls felt they needed to lose weight (p.2). In addition, it has been reported that one in five high school girls binge eat regularly (Levine, 1987) and 79% of female college students experience bulimic episodes (Fish, 1988).

The onset of eating disorders usually occurs during adolescence (Garner et al., 1983; McSherry, 1984; Abraham and Llewellyn-Jones, 1989). Anorexia nervosa most often begins between the

ages of 12 and 18 (McSherry, 1984; Shore, 1987) while bulimia most often begins in the late teens and early twenties (Leichner, 1986; Wooley and Wooley, 1986).

The continuous rise in the incidence of anorexia nervosa and bulimia suggests that these conditions are extreme manifestations, in most women and some men, of an immense obsession with thinness and a general dissatisfaction with body shape and size.

Eating Disorders in Sport and Fitness

A significant number of teens at the high school level become involved in sports, either at a competitive or recreational level (Grandjean, 1988; Slavin, 1987). Sports not only act as a socially oriented activity, but they can contribute to the student's popularity, and they can provide an avenue for students to experience success and fun (Moriarty, 1986).

It is not uncommon for schools and colleges to place great emphasis on the value of sport:

> With the stress that is placed on playing hard and developing ultimate physical control, sport appears to have become a secular vehicle for beliefs that originally had religious significance within the protestant ethic. Performance in sport is held up as the epitome of excellence, with enthusiasm and commitment culminating in festivals like the Olympic Games where its values are ritually celebrated, and without reservation.....the great majority of those who become anorexic have not only been very good at some form of sport before their emaciation became noticeable, but also very committed (Duker and Slade, 1988,p.109).

In the initial stages of the illness, it is extremely difficult for parents and teachers to recognize those individuals who are on the way to developing an eating disorder. Vredevelt and Whitman (1985) report that there is a high incidence of

eating disorders among serious athletes, many of whom compete at the national and international level. Certain sports are more apt than other sports to be associated with eating disorders (Yates,-1991). Yates (1991, p. 65) feels that gymnasts present the highest rate of anorexia found in any sport with an estimated 20-25 percent becoming bulimic to keep from gaining weight and that female gymnasts and distance runners have the lowest body fat percentage of all women athletes.

A number of highly successful athletes have recently come forward to share their experiences. Rosalyn Summners, former world figure skating champion, and U.S. Olympian in 1984, gave up her professional skating career because she was suffering from bulimia. Nadia Comenici, emaciated and suffering from bulimia and anorexia nervosa, was not able to compete in the 1983 World Student Games in Edmonton. Mary-Lou Retton, former Olympic gold medallist renowned for a 'perfect ten' score at the Los Angeles Olympics in 1984, battled with bulimia. Kathy Ormsby and Mary Wazeter, both with promising careers ahead of them as long distance runners, were also struggling from eating disorders. Both girls are now paralysed as a result of desperate attempts to commit suicide and escape from their uncontrollable predicaments (Moriarty and Moriarty, 1986).

A number of athletes have also come forward and confessed they were victims of eating disorders. Included are Barbara Warner, the 1988 Olympic gold medallist in downhill skiing, and Charlene Wong, 1984 silver medallist at the Canadian figure skating championships (Moriarty and Moriarty, 1986).

In interscholastic sports, athletes sometimes experience

tremendous pressure from coaches and teammates to improve their performance, often to the point where coaches have urged athletes to diet (Vredevelt and Whitman, 1985; Valette, 1988; Duker and Slade, 1988). Reducing weight, according to Valette (1988), is the first thing most coaches and trainers suggest when trying to improve an athlete's endurance and speed.

Physical activity alone does not cause eating disorders. Anthony, Wood, and Goldberg (1982) suggest that individuals who were already at risk of developing eating disorders tend to gravitate towards activities that emphasize body image. Sports that demand a low level of body fat include such aesthetic activities as gymnastics, track and field, figure skating, and dance (Moriarty, 1986; Leichner, 1986). According to Vredevelt and Whitman (1985), boxers, rowers and wrestlers are under pressure to meet certain weight requirements for competition; thus similar demands are placed on young males. Valette (1988) has provided support for these contentions in noting:

> As a figure-conscious high school cheerleader, Beth found she could keep her weight down by vomiting when she strayed from her diet. She learned this from the members of the wrestling team who learned it from the coach (p.25).

According to Grandjean (1988), more than seven million boys and girls participate in competitive sports in U.S. high schools and nearly 20 million are engaged in out of school recreation and competitive sports (p.115). In Canada, youth sports are also similar in popularity and percentage of participants (Canada Fitness Survey, 1983; Fitness Canada, 1987). These athletes are in an age group which reflects the highest risk of nutrition

problems (Grandjean, 1988, p.115) and their participation in sports may lead to the development of eating disorders (Leichner, 1985; Burkes-Miller and Black, 1988).

Schools and Eating Disorders

Children growing up in contemporary society are constantly exposed to the message that to be successful, one has to look successful. Television commercials, fashion magazines, and movies play a powerful role in the socialization of children by stressing the 'right' clothes to wear, the 'right' hairstyles, and the 'right' amount of thinness to gain acceptance of others at school. This is learned while students are young and is constantly reinforced as they progress through school. As Bryant-Waugh (1991) points out:

> ...anorexia nervosa has been seen in both boys and girls as young as eight years old ...increasingly common in school-age children is obsession with weight, feelings of fat, and dieting (p.1).

A recent study at Stanford University showed that 13% of the 1,728 tenth graders surveyed showed characteristics of bulimia (Killen et al., 1986). Another survey by the University of California found that 80% of the fourth grade girls in San Francisco may be dieting or want to diet (Valette, 1988).

Recent studies suggest it is imperative that schools make efforts to prevent these potentially fatal disorders from occurring in their students (Porter, Morrell, and Moriarty, 1986; Carney, 1986; Fish, 1988; Moriarty, Moriarty, and Rollinson, 1994). Valette (1988) states that "Knowledge is essential to preventing an eating disorder" (p.22). Therefore, teachers can play a unique role in the early detection and prevention of

anorexia nervosa and bulimia, as described in Lindsay and Janz (1985):

> ...we are constantly teaching principles of fitness, nutrition, and weight control, if not through specific course content, then through our personal example as role models. By promoting a healthy but not unrealistically thin body, we are able to counter the barrage of media and cultural influences that promote 'thin is in' and enhance the preventive measures of other health professionals (p.42).

At five years old, children enter school (excluding pre-school, as not all children have this opportunity). In grades three to six, 45 percent of the children want to be thinner and 37 percent have already tried to lose weight, mostly by exercise. By the time they reach adolescence, a number of these youngsters will resort to serious bingeing, high restrictive dieting, or purging (Yates, 1991). Although eating disorders can begin later in life, most often the problem begins to manifest itself in the adolescent or teen years (Vredevelt, Newman, Beverly, and Minirth, 1992). By the time they complete their secondary education, provided they do not drop out beforehand, students will have spent more than 12 years in school.

All teachers and guidance counsellors should be concerned about eating disorders as health and life threatening illnesses, particularly physical and health educators and coaches, since as many as 10-20% of the female high school population are affected by some form of eating disorder (Moriarty, Moriarty, and Rollinson, 1994). Therefore, teachers are in a position to observe students' exercise patterns and attitudes towards slimness. Lindsey and Janz (1985) suggest that it is essential

for educators to acquire a base of knowledge and skills enabling them to identify and respond to students with eating disorders, and to prevent or reduce the occurrence of these conditions in schools (p. 43).

BANA-Can/Am and Preventive Education

The Bulimia Anorexia Nervosa Association-Canadian/American (BANA) was formed in 1983 by parents, professionals, and patients in Southwestern Ontario who were concerned about the epidemic spread of eating disorders (Moriarty, Shore, and Maxim, 1990; Shore, 1907). BANA is a primary and secondary preventive education center which provides a number of services. These include counselling, general information, self-help and support groups for patients and their families respectively, seminars and workshops, a reference library of written and audio-visual materials in both english and french, a Speaker's Bureau, and a hotline.

Due to exceedingly great school demands for speakers, an increasing interest among teachers and students, inadequate instruction regarding prevention, and the lack of a comprehensive curriculum, BANA decided that it was time to develop a program which could be used in schools throughout North America (Moriarty, Shore, and Maxim, 1990: 407). In 1986, A Preventive Curriculum for Anorexia Nervosa and Bulimia was developed by Barbara Carney and translated into french as Un plan d'etudes pour la prevention de l'anorexie nerveuse et la boulimie by Marie Veilleux on a grant from the Ontario section of Health and Welfare Canada. Both individuals were BANA staff members. Barbara

Carney had expertise in communication studies (she is presently a professor at the University of Windsor),and she had a considerable amount of experience teaching at high schools in England, Australia, and Canada. Marie Veilleux is a professional translator.

A Preventive Curriculum For Anorexia Nervosa and Bulimia (Carney, 1986) contains an overview for teachers and four other sections for students at different grade levels. These sections are:

(1) "Dieting and Eating Disorders" which contains five lesson units for girls, grades 9-11, in physical and health education or family studies. This questionnaire was used in this study.

(2) "Male Concerns with Eating Disorders", which contains a one lesson unit for boys, grades 9-11, in physical and health education. This questionnaire was not used in this study.

(3) "The Socio-cultural background of Anorexia Nervosa and Bulimia in North America", which contains five lesson units for students, grades 9-12, in sociology. This questionnaire was not used in this study.

(4) "Socio-cultural Influences which Promote Eating Disorders and How to Forestall Them", which contains five lesson units for students in grades 7-8. It is also appropriate for a mature grade 6 class. This questionnaire was used in this study.

The areas of concern discussed in the lesson plans include:
(a) What a student should do if he or she suspects that a friend has an eating disorder.
(b) The individual 'setpoint' theory of body weight and the

dangers of many popular dieting practices.

(c) The invalid nature of our society's stereotypes of 'fat' and 'thin'.

(d) The value of learning assertiveness, especially for girls in our society.

(e) The incidence and dynamics of eating disorders in males.

(f) The responsibilities of male and female relatives and friends towards eating disordered individuals.

(g) The issues of identity, separation and control in adolescence, and the confusing role models presented to girls.

(h) Societal influences on the individual's values, especially pressure from media advertizing.

(i) The use of food to solve emotional difficulties.

(j) Peer and adult pressures in adolescence.

(k) How to build a healthy self-concept in early adolescence.

The curriculum was developed in response to a large student interest in anorexia nervosa and bulimia. It was produced in order to help curb the high incidence of these disorders in Canada. The author of the curriculum felt that to do this, knowledge and attitudes towards slimness had to be changed. The attitudes towards dieting, competition, and the roles of adolescent girls and women in our society also needed change. Girls and women had to be made aware of the conflicting pressures of our society, such as the pressure from media advertisements to reduce weight by dieting, the biological urges created in adolescence, and the pressures of choosing a career.

Carney felt that students needed to be aware of the sources of these pressures, and that they will have to learn to make

choices in responding to them. They need to accept that very few individuals can excel in all areas at once and that some may need training or help asserting themselves with their peers or with adults. Students also need to know the pressures they face in order to be supportive of an eating disordered individual, be they a friend or family member. It is also important that they realize that 10% of the anorexic and bulimic population is male.

Carney (1986, p.1) states that "...raising consciousness and changing attitudes is best done through discussion and experiental learning..." and has thus developed the curriculum with emphasis on activities and discussion. There is a teacher's commentary containing ideas and facts on initiating debates, master sheets for overhead transparencies, and handouts providing students with
information and facilitating activities. More material is provided in each section than most teachers will have time to use, in order that teachers have a wide variety of approaches from which to choose.

The master sheets for handouts or overhead transparencies are grouped by the letters 'O', 'H', 'S' and 'J' and follow the sections to which they refer. Specific materials are suitable for each section in the curriculum and group being taught.

The true/false, multiple choice/content, knowledge and attitude tests are at the end of each section and cover the main points of the section. They can be easily converted to short answer questions if this format should be preferred. The knowledge and attitude tests may also be used while teaching the materials, as a starting point for discussion.

To make the materials easier to use, the author of the curriculum has bold typed the learning objectives, boxed the activities suggested to promote motivation and experiential learning, and capitalized the answers the class may generate. A commentary is included which contains points that need to be reinforced to achieve the learning objective. There is little repetition of the actual activities. At the end of the curriculum is a list of resources such as books and audio-visual aids which are available.

Southwestern Ontario Schools

Shore (1987) and Rollinson (1994) demonstrated the need for preventive education about eating disorders in Southwestern Ontario. In Shore's study, students, aged 11-20, from anglophone schools in Windsor and the surrounding area, were assessed for the possible prevalence of behaviors and attitudes commonly found in sufferers of eating disorders. It was found that at ages 11 and 12, females experience a drive for thinness and dissatisfaction with their body shape. This was less prevalent in males. As they progress through puberty, females become increasingly dissatisfied with their appearance but their drive for thinness remains the same. Males in the prepubertal stage of development were found to be more dissatisfied with their shape than were older males but there was no difference in their drive for thinness.

Research was also completed in Southwestern Ontario from a French-Canadian perspective and considering the francophone population living in Windsor and surrounding rural areas, such research was warranted. Leichner et al. (1986), Leichner (1987),

and Davey (1990) suggest that French-Canadian society promotes relatively the same negative socio-cultural attitudes regarding the overweight physique that are seen in other parts of Canada and North America. These pressures to diet and become extremely thin are directed primarily towards women.

Rollinson (1994) found that even at ages 11 and 12, females were experiencing dissatisfaction with their body shape and were driven towards thinness. This was found to be less prevalent in males. As females progressed through puberty, their dissatisfaction increased but their drive for thinness remained the same. Prepubertal males experienced more body dissatisfaction than older males but drive for thinness remained the same as age increased. It was also found that as body dissatisfaction increased in students, so did the level of activity and bulimic tendencies.

Shore (1987) points out that puberty is a natural phenomenon that occurs in all children regardless of race, sex, social class, or language. Eating disorders are common throughout western nations as is evidenced by the epidemic proportions reported throughout Europe (Abraham and Llewellyn-Jones, 1989).

Students attending a French-Canadian school, which exposes them to a French-Canadian culture and offers them an education exclusively in the French language, not surprisingly therefore appear to experience the same attitudes towards dieting and slimness as their English-Canadian counterparts attending English schools. Many of these former students come from French-Canadian families where french is spoken by at least one parent. Due to the presence of a population of French-Canadians living in

Windsor and the surrounding rural counties, and the bilingualism of this country as a whole, there is a need to investigate the efficacy of an educational program designed to prevent the onset of eating disorders, by sensitizing students towards an awareness and understanding of the issues involved.

Curriculum and Evaluation

According to the Ontario Ministry of Education (1991) individuals require knowledge about nutrition and food issues in order to increase their well-being by making appropriate choices about what they eat. These choices also depend on the individuals' value system and lifestyle. Students should become aware of the broad range of nutritional issues that affect their dietary patterns. Therefore, basic courses should focus on increasing student awareness. In these courses, the theoretical knowledge and concepts presented should be directly related to classroom experience. Evaluation and interpretation of what a student has learned should be an integral part of the instructional component of the courses. The purpose of evaluation is to provide information about student progress in achieving objectives. The evaluation process should reflect the aims and objectives of the program. The continuous on-going assessment of student achievement must be an integral part of the teaching-learning process. Evaluation is necessary not only to determine student achievement, but to determine the effectiveness of the program.

CHAPTER 3

METHODOLOGY

Data Collection

Approximately 300 male and female upper elementary and high school students, from grades 6-12, attending French schools in Windsor and the surrounding counties participated in this study. A workshop was held and teachers were asked to volunteer for the study. Teachers were given verbal permission from the local school boards to participate in this study. Teachers volunteered their classes, and in this manner the students were chosen for the study.

The subjects in this study were divided into four groups:

Males-Grade School (n=63)

Females-Grade School (n=76)

Males-High School (n=61)

Females-High School (n=115)

The purpose of this study was to determine if the curriculum had an effect on these students. Each group was further broken down into two more groups, experimental and control (no control group was volunteered for the males in the high school group):

Males-Grade School Experimental (n=41)

Males-Grade School Control (n=32)

Females-Grade School Experimental (n=44)

Females-Grade School Control (n=32)

Males-High School Experimental (n=61)

Males-High School Control (n=0)

Females-High School Experimental (n=88)

Females-High School Control (n=27)

Females-High School Control (n=27)

Before teaching the units, high school teachers were provided, by the researcher, with a set of instructions (see Appendix A). They were instructed to ask students to complete the pretests, which should take about 25 minutes. Students were not to discuss their answers and teachers should provide as little guidance as possible except for the upper elementary students, grades 6-8. The teachers were asked to provide the necessary interpretation of each item contained in the EDI (which was used for the study completed by Rollinson (1994) that identified the prevalence of eating disorders in this sample) to ensure that the students in grades 6-8 understand what was being asked. All students at this grade level participating in this study were also to be provided with the appropriate pretests and posttests for knowledge, attitude, and behavior, while only the experimental group would receive instruction through the curriculum.

Teachers were instructed to explain to students that there are no right or wrong answers, that scores would not be included in their grades, and that there was no time limit. The testing environment was to be non-competitive. Students were asked not to put their names on the forms but to complete demographic information regarding sex, age, grade, and locality of school.

Un plan d'etudes pour la prevention de l'anorexie nerveuse et la boulimie is BANA's French version of its preventive education program. It was designed to promote healthy dietary practices and attitudes towards body size and shape, and a

cognitive awareness and understanding of the issues surrounding eating disorders. Implementation of this program should, according to this model, reduce the prevalence of eating disorders in grades 6-12.

Each teacher taught a section which corresponded with his/her subject area. An even number of teachers taught each section and instruction took place simultaneously in each school. The curriculum also contains master sheets for overhead transparencies or handouts, an annotated list of books, and lesson plans. Although a large proportion of the curriculum is discussion based, several audio-visual resources were available for loan upon request. Each school, because of its cooperation, was given a complementary copy of the curriculum for future use.

The posttests from the curriculum questionnaires were to be readministered after the units had been taught to the experimental group. The pretests and the posttests of knowledge, attitude, and
behavior are exactly the same, except that the former is administered before and the latter is administered after student exposure to the curriculum.

The pretests and posttests, which are contained in the curriculum (see Appendices B and C), directly reflect knowledge of the information that was to be taught. Therefore, it may be concluded that they protect for face validity. Their design also protects for internal validity by controlling the effects of history, maturation, testing, instrumentation, regression, selection, mortality, and interaction of test and treatment (Moriarty, 1986).

The teachers scored the pre and post tests. Answer keys were made available. For the grade school pre and post tests, the maximum scores (see appendix B) were: Knowledge 10, Beliefs 24, Perceptions 36, Behaviors 14, Wishes 36, S1 48, and S2 48. For the high school pre and post tests, the maximum scores (see appendix C) were: Knowledge 20, Beliefs 24, Perceptions 36, Behaviors 12, and Wishes 36.

Both the experimental and control groups received the pretests for knowledge, attitude, and behavior. Only the experimental group then received instruction through the curriculum. Finally, both the experimental and control groups received the posttests. It was not expected that the control group would show any significant changes in scores from pretest to posttest. The experimental group, which was exposed to the curriculum was expected to show significant changes in certain areas, as previously described in the hypotheses (see p.7).

There was additionally an open-ended questionnaire and an interview with all of the teachers, who commented on the program and indicated their approach to the new material, problems that they encountered, and their overall general impressions (see Appendix D)

Data Analysis

The data collected was analyzed quantitatively. Data was coded on a University of Windsor General Purpose Ten-Choice Response Sheet (see Appendix E) and entered into the computer. Teachers responses to the questionnaire weren't analyzed quantitatively but the frequency of their positive and negative responses was counted and noted.

The quantitative evaluation included a statistical analysis of the unit test (pre and post) scores. Comparisons were conducted on overall scores of the curriculum's unit tests by using grouped versus matched T-tests. A paired comparison T-test was performed on some student's knowledge, attitudes, and behavior scores of the pretests and posttests to determine if the curriculum had an effect on whether students understood the various parameters of eating disorders and to determine whether sex had an effect on the measures.

Univariate analyses (ANOVA'S) were conducted on the pre and post questionnaires for the experimental and control groups. A Scheffe post hoc test was then performed. Multivariate analyses (MANOVA'S), which reduce Type 1 error were conducted on the pre and post tests to examine male versus female differences in both the experimental and control groups to determine if there was a significant effect. Pearson product correlations were done to determine if there was a correlation between the subscales (ie. knowledge, attitudes and behavior).

Shore (1987) suggests, in his comparable study, that the investigation involve the choice of the probability level of .05 as the level of significance that has the greatest simultaneous resistance to both Type I and Type II errors (p.72). This probability level of .05 has also been adopted in research similar to the present endeavor (Garner, Olmsted, Polivy, and Garfinkel, 1984; Porter et al., 1986). Therefore, the probability level of .05 was adopted for the purposes of this study.

CHAPTER 4

RESULTS

In this chapter, the data collected in this study are organized into two sections, grade school and high school. Each section contains a description of the scores obtained on each of the subscales of the pre and posttests for each of the two groups. First, the results for the grade school subjects will be discussed followed by the results for the high school subjects.

Table 1 (p.35) describes the results for the grade school experimental and control groups and contains the means and standard deviations. There was a significant increase in knowledge from pre to post scores for the experimental group $F=1.2$, $DF=85$, $p<.046$. There was no significant difference in scores for each of the other subscales. There was, however, a trend towards an increase in scores for the subscale Perceptions even though this was not significant. There was no significant difference in scores for the control group.

Table 2 (p.36) describes the pre and post grade school results for the experimental group males and females with means and standard deviations. There was a significant difference between knowledge scores from pre to post in males $F=1.3$, $DF=84$, $p<.044$ and in females $F=1.0$, $DF=84$, $p<.046$ but not for any other subscale. There was a trend towards an increase in scores from pre to post for females on the subscale Perceptions and on the S1 subscale but this was not significant at the .05 level.

Table 3 (p.37) describes the grade school results for the control group males and females pre to post with means and standard deviations. There was no significant increase in scores

for this group.

Table 4 (p.38) describes the overall results for pre and post experimental and control means and standard deviations for high school. There was a significant increase in knowledge scores $F=1.1$, $DF=85$, $p<.049$ for the experimental group from pre to posttest but not in any of the other subscale scores. There was a trend towards an increase in Perception scores but it was not significant. There was a decrease in scores for the control group on wishes but this was not significant.

Table 5 (p.39) describes the results for the experimental group, males and females, on the pretest and posttest. There was a significant increase in knowledge for both males and females from pre to post.

Table 6 (p.40) describes the results for the control group pre and post means and standard deviations for high school. There were no significant differences between scores on each subscale but there was a trend towards a decrease in scores for wishes.

Pearson product correlations revealed there were no correlations between the three subscales. Therefore, they each measure separate aspects and do not overlap.

Hypotheses 1 (a), (b), and (c) were supported. There was a significant increase in knowledge for grade school students, grade school males, and grade school females.

Hypotheses 2(a), (b), and (c) were supported. There were no significant changes in attitude for each group.

Hypotheses 3(a), (b), and (C) were supported. There were no significant changes in behavior for each group.

Hypotheses 4(a), (b), and (c) were supported. There was a

significant increase in knowledge for high school students, high school males, and high school females.

Hypotheses 5(a), (b), and (c) were supported. There were no significant changes in attitude for each group.

Hypotheses 6(a), (b), and (c) were supported. There were no significant changes in behavior for each group.

Teacher's Questionnaire Responses

At the end of the teacher's involvement in this study, each teacher was given an open-ended questionnaire to complete regarding his or her overall reactions and the students' reactions to the curriculum (see Appendix E). This was followed by an informal discussion. The majority of teachers thought the curriculum was excellent and they developed an appreciation for the activities. They expressed that it contained variety, was well constructed, was up-to-date, and contained new material which they did not know. They felt it was well prepared and put together, as well as being well laid out and teacher oriented.

The majority of teachers thought the curriculum reflected well the material to be taught and that it covered the lesson plans adequately. They said the students liked the style of the tests
(multiple choice, true or false) and the teachers who chose to use the test for their own evaluation thought this type of test was easier to mark.

Some teachers thought the level of french used was difficult for this region and that students needed help in many cases. They said, however, this was not a problem that couldn't be overcome. The language was clear and precise but had to be simplified for

some students.

The teachers were asked if their attitudes towards dieting, societal pressures, assertiveness, etc. changed as a result of exposure to the curriculum. Most teachers said they were already aware of the societal pressures towards dieting and thinness. They felt that students better understood the importance of healthy eating and that students' already existing attitudes were reinforced after exposure to the curriculum. Others thought the curriculum helped better inform the students. The teachers also noted that the students now feel more comfortable with their bodies, are less hung up on dangerous dieting, and were becoming more concerned about their friends.

TABLE 1: Grade School results for experimental and control groups-means and standard deviations.

Subscale	Experiment Pre	Experiment Post	Control Pre	Control Post
Knowledge	4.8 (2.8)*	6.1 (3.2)*	5.7 (2.2)	5.8 (2.6)
Beliefs	10.1 (2.5)	10.3 (2.8)	10.7 (1.8)	10.5 (2.7)
Perception	42.1 (7.7)	43.8 (8.3)	46.3 (7.0)	49.1 (6.7)
Behaviors	20.7 (6.3)	20.1 (6.9)	25.0 (5.7)	23.0 (7.2)
Wishes	51.8 (6.7)	51.2 (6.8)	53.8 (4.9)	54.1 (7.8)
S1	32.7 (4.8)	34.6 (5.4)	32.7 (4.5)	33.5 (5.5)
S2	5.0 (2.0)	4.4 (2.0)	7.0 (1.9)	6.6 (2.5)

* = significant at .05 level

TABLE 2: Results for experimental group, males and females, pre and post-Grade School means and standard deviations.

Subscale	Males pre	Males post	Females pre	Females post
Knowledge	4.7 (2.8)*	5.4 (3.4)*	4.8 (2.6)*	6.7 (2.9)*
Beliefs	9.7 (2.2)	10.3 (2.6)	10.4 (2.7)	10.3 (3.0)
Perception	44.4 (7.1)	44.4 (7.7)	39.9 (7.7)	43.3 (8.9)
Behaviors	21.3 (6.4)	22.9 (5.9)	20.2 (6.2)	18.1 (7.0)
Wishes	51.6 6.2)	50.4 (8.0)	51.9 (7.2)	52.0 (5.5)
S1	33.3 (4.2)	33.3 (5.2)	32.2 (5.4)	35.7 (5.4)
S2	5.3 (2.0)	4.6 (2.1)	4.7 (2.0)	4.3 (2.0)

* = significant at .05 level

TABLE 3: Results for control group, males and females, pre and post-Grade School means and standard deviations.

Subscale	Males pre	Males post	Females pre	Females post
Knowledge	5.8 (2.4)	5.7 (2.6)	5.7 (2.2)	6.0 (2.1)
Beliefs	10.3 (2.0)	10.0 (3.0)	11.0 (1.7)	11.2 (1.4)
Perception	47.7 (5.2)	49.3 (6.5)	45.7 (7.9)	48.6 (7.7)
Behaviors	26.8 (5.4)	23.0 (6.8)	23.8 (5.7)	23.2 (8.5)
Wishes	53.7 (4.9)	54.0 (6.5)	54.0 (4.8)	54.4(10.5)
S1	33.2 (4.0)	32.3 (5.7)	32.6 (4.8)	34.6 (4.2)
S2	7.4 (1.9)	6.8 (2.4)	6.7 (1.9)	6.1 (2.6)

TABLE 4: Overall results, pre and post, experimental and control-High School means and standard deviations.

Subscale	Exper. pre	Exper. post	Control pre	Control post
Knowledge	10.5(4.0)*	13.2(3.7)*	9.3 (3.5)	9.6 (4.2)
Beliefs	7.0 (2.2)	7.8 (2.1)	6.6 (1.4)	6.7 (1.8)
Perception	39.7 (7.6)	41.9 (9.0)	41.3 (6.4)	43.1 (7.8)
Behavior	20.9 (8.5)	19.4 (8.0)	21.4 (6.7)	20.7 (7.6)
Wishes	51.9 (5.9)	52.8 (7.5)	55.1 (6.7)	52.7(12.4)

* = significant at .05 level

TABLE 5: Results for experimental groups, male and female, pre and post - high school means and standard deviations.

Subscale	Experiment Pre Males	Experiment Post Males	Experiment Pre Females	Experiment Post Females
Knowledge	10.0(3.3)*	13.0(3.2)*	10.7(4.3)*	13.8(3.7)*
Beliefs	6.5 (1.6)	7.4 (1.9)	7.4 (2.5)	7.9 (2.2)
Perception	42.0 (7.6)	42.7 (6.6)	38.2 (7.3)	39.6 (8.9)
Behavior	22.9 (7.0)	21.7 (6.9)	19.5 (9.1)	18.3 (8.3)
Wishes	50.9 (6.6)	52.4 (9.3)	52.7 (5.2)	53.1 (6.1)

*=significant at .05 level

TABLE 6: Results for females control group, pre and post-High School means and standard deviations.

Subscale	Female control pre	Female control post
Knowledge	9.3 (3.5)	9.6 (4.2)
Beliefs	6.6 (1.4)	6.7 (1.8)
Perception	41.3 (6.4)	43.1 (7.8)
Behaviors	21.4 (6.7)	20.7 (7.6)
Wishes	55.1 (6.7)	52.7 (12.4)

Chapter 5

Discussion

Sub-problem one examined if there will be a change in knowledge for (a) grade school students (b) grade school males and (c) grade school females. There was a significant increase in knowledge for grade school males and grade school females. Based on the findings of Shore (1987) and Moriarty, Shore and Maxim (1990) this was predicted and change took place. This prediction was made because of the results of a study done in the english schools which found a significant increase in knowledge but not in attitudes and behavior (Moriarty, Shore, and Maxim, 1990). Based on the literature, students in french schools are under the same socio-cultural influences as those in the english schools and the prevalence of eating disorders in the french schools parallels that in the english schools (Rollinson, 1994). Therefore, it was predicted that the curriculum would change knowledge in the french schools the same as it did in the english schools.

Sub-problem two examined if there will be a change in attitude for (a) grade school students (b) grade school males and (c) grade school females. As predicted in the literature by Shore (1987) and by Moriarty, Shore and Maxim (1990) there was no change in attitude for grade school students, males or females. This may mean that five days is not a long enough period to produce an attitude change.

There was a trend developing, however, whereby there was at least an increase in scores but not a significant increase. For 'perceptions', there was an increase in scores which may suggest

that as students became more aware of eating disorders through exposure to the curriculum, their way of viewing themselves changed. They began to view themselves more positively. For 'wishes', there was an increase in scores which may suggest that as students became more aware of eating disorders, their wishes for how they desired to look became more positive. For the Socio-cultural 1 questionnaire, the increase in students' scores may reflect their positive changes in attitude as a result of learning about the impact of society in promoting eating disorders.

Sub-problem three examined if there will be a change in behavior for (a) grade school students (b) grade school males and (c) grade school females. There was no change in behavior as predicted in the literature by Moriarty, Shore and Maxim, (1990). Five teaching days may not be sufficient to produce a change in behavior. Past research (Moriarty, Shore, and Maxim, 1990) found that in the english schools, five days of exposure to the curriculum did not produce changes in attitude or behavior.

Sub-problem four examined if there will be changes in knowledge for (a) high school students (b) high school males and (c) high school females. There was a significant change in knowledge. Knowledge scores increased as a result of exposure to the curriculum. It was predicted from the literature (Moriarty, Shore, and Maxim (1990) that this would occur.

Sub-problem five examined if there will be changes in attitude for (a) high school students (b) high school males and (c) high school females. There were no changes for either group as was predicted.

Sub-problem six examined if there will be a change in behavior for (a) high school students (b) high school males and (c) high school females. As predicted, there were no changes in behavior scores (Moriarty, Shore, and Maxim, 1990).

The curriculum was effective in changing knowledge but this change in knowledge did not produce changes in attitude or behavior. This may have been because of the short time period over which the curriculum was taught. The literature suggests that the continuous assessment of student achievement in learning about food and nutrition issues must be an integral part of the teaching-learning process (Ontario Ministry of Education, 1991). Therefore, five days would not be sufficient in the on-going assessment of students' changes in attitudes and behavior as a result of the learning process taking place while they are being exposed to the curriculum.

The pretests and posttests were exactly the same and directly reflected the content of the units. Therefore, the evaluation process directly reflected the aims and objectives of the curriculum. The two groups, high school and grade school received two different sets of questionnaires so it was not applicable to compare them with each other. Girls were only compared to boys through the responses to the open-ended questionnaires of the teachers. Here it was found that girls probably showed more interest in the problem of eating disorders than boys. This may have had an impact on their scores.

Chapter 6

Conclusions and Recommendations

Previous research (Rollinson, 1994) was completed in six French schools in Southwestern Ontario to establish the prevalence of eating disorders among students in grades six to eleven. It was found that females as young as 11 and 12 were experiencing dissatisfaction with their body shape and were driven towards thinness. This body dissatisfaction increased as they progressed through puberty while their drive for thinness remained the same. Prepubertal males also experienced body dissatisfaction and a drive for thinness which remained the same as age increased. It was also found that as body dissatisfaction increased in students, so did the level of activity and bulimic tendencies. Given this prevalence, educational intervention was necessary.

The purpose of this study was to pilot test the french version of A Preventive Curriculum for Anorexia Nervosa and Bulimia in six french schools in Southwestern Ontario to see if it was effective in producing changes in students' knowledge about eating disorders, their attitudes towards their body and weight, and their behaviors. This was done by first giving students pretests for knowledge, attitudes and behavior, which were included as part of the curriculum. Then, an experimental group was taught a five day section of the curriculum, while a control group received no instruction. At the end of the five days, both groups received the posttests, which are exactly the same as the pretests. The data was then coded and statistical analysis was performed on the scores.

It was found that exposure to the curriculum produced a significant change in knowledge. Knowledge increased significantly from pre to posttest. It did not, however, produce a change in attitude or behavior. This supports the literature by Shore (1987) and by Moriarty, Shore and Maxim (1990) who found that exposure to the english curriculum produced a change in knowledge but not in attitudes or behavior.

Two units of the curriculum were taught and there was a significant increase in knowledge as a result. These units contained a broad range of information to increase the students' knowledge about eating disorders. This information reflected the aims and objectives of the program and the evaluation process provided information to the teachers about students' progress. The knowledge and information increased students' well-being by assisting them in making appropriate choices about what they ate and about eating disorders. It did not, however, change their value systems or their lifestyle. It may be concluded that these units of the curriculum were effective. However, it was recommended by the teachers, that for grade six students, it be simplified so that they are better able to understand the material being presented. It was also recommended that a similar curriculum be put in place for even younger students, to alert them to the dangers of dieting and eating disorders.

It is recommended that teachers use the other sections of the curriculum and integrate them into their appropriate subject areas. Long term use of the curriculum would provide better insight into other possible changes that may occur. Long term use may even produce changes in students' value systems and their

behavior. Five days was a relatively short teaching span. More accurate data would be available after repeated interventions with the curriculum for longer periods of time.

Further research should explore the effects of long term use of the curriculum. Research is also needed on the remaining units of the curriculum. Future studies might also consider the use of matched t-tests in examining pre and post changes, to examine individual, as opposed to group, differences. Finally, it might be worthwhile to follow up on the students tested through this study, to examine longer term changes to attitudes and behaviour.

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APPENDIX A

Introduction for Teachers

Introduction

Les désordres alimentaires:

L'ANOREXIE NERVEUSE - est un trouble psychologique caracterisé par la peur constante de devenir obèse, la manque estime de soi, et la distorsion de l'image corporelle entraînant des privations auto-induites.

LA BOULIMIE - est un trouble psychologique caracterisé par des épisodesrécurrents d'alimentation au cours desquels la personne se sent incapable d'arrêter par elle-meme de manger. Ces épisodes sont suivis des diverses tentatives en vue du perdre du poids, par exemple, des vomissements auto-induits.

Ces deux désordres se trouvent de plus en plus dans les adolescents de nos écoles. La plupart des victimes sont agées de 11 à 18 ans et on a établi que de 4 à 20 pour cent des adolescents qui souffrent de l'anorexie meurent. Le taux de mortalité chez les boulimiques est plus élevé. Environ 10 pour centdes victimes de l'anorexie nerveuse et la boulimiesont des garcons et 90 pour cent sont des filles.

L' éducation des jeunes est une méthode très importante pour la prevention de ces deux désordres. C'est à nous, les enseignants, de sensibler les étudiants et les amener à changer leurs attitudes. Un plan d'études est un outil de promotion de la santé pour les jeunes.

LES BUTS DU PROJET

L'intention de ce projet est de determiner l'utilité du plan d'études pour la prevention de l'anorexie nerveuse et la boulimie, comme ressource dans les écoles francophones de Windsor. Ce plan, developpé par Barbara Carney, a été publié par l'association pour l'anorexie nerveuse et la boulimie, et traduit en francais par Marie Veilleux.

On a completé, il y a plusieurs années, un programme pilote dans les écoles anglophones de Windsor. Il a été determine, comme resultat, que le plan d'études pour la prevention de l'anorexie nerveuse et la boulimie, edition anglaise, etait bien utile pour augmenter la connaissance et ameliorer les attitudes des étudiants concernant les désordres alimentaires. L'édition francais du plan manque cette évaluation.

LA MÉTHODE

Nous desirons votre coopération en suivant les étages suivantes:

1. Au debut du projet, demander aux étudiants de completer les questionnaires (de votre chapitre du curriculum) et l'EDI, (Ceci

devrai prendre environ 15 minutes) et fait la compliation.

2. Présenter les leçons de votre chapitre aux étudiants.

3. À la fin des leçons, les étudiants doivent completer encore une fois des mêmes questionnaires pour determiner s'il y a eu des changements d'attitudes et de connaissance au sujet de troubles alimentaires.

4. Séparer la compilation des questions de connaissance et celles d'attitudes. Separer l'EDI.

5. Demandez aux etudiants de completer les fiches d'évaluation du projet a ce temps-ci.

QUESTIONNAIRE A - PRETEST DU CURRICULUM
QUESTIONNAIRE B - POSTTEST DU CURRICULUM
QUESTIONNAIRE C - EDI (QUESTIONNAIRE DE TROUBLES D'ALIMENTATION)

Il y aura un groupe contrôle d'étudiants qui completeront les questionnaires a meme temps que les autres, au debut et à la fin, mais on ne présente pas les leçons a ce groupe.

<u>POUR NOUS CONTACTER</u>

SUSAN ROLLINSON - 208B BROCK ST., WINDSOR N9C 2S6
TELEPHONE: 519 252-8213 APRES 6H OU AVANT MIDI

DR. R. MORIARTY - FACULTE DE CINETIQUE HUMAIN, UNIVERSITE DE WINDSOR
TELEPHONE: 519 253-4232 EXT. 2429

Je vous remercie de votre cooperation et j'espere que ce projet sera une experience positive pour vous et vos etudiants.

APPENDIX B

Pretests and Posttests - Grade School

Name _____

Grade _____
Date _____

TEST QUESTIONS: SOCIO-CULTURAL INFLUENCES(grades 7&8)

Items 1-7: fill in the circle for statements which you think are true.

O 1. Anorexia nervosa is an illness that makes people starve themselves.

O 2. Bulimia is an illness that makes people sleep a lot.

3. Which of these factors would make you more likely to get anorexia?
O a. You're the kind of person who wants to please others
O b. Someone you love dies
O c. Your parents don't make breakfast or lunch for you
O d. Your parents are very strict
O e. You like to do everything you try perfectly
O f. You have a lot of brothers and sisters
(There is more than one correct answer for this question.)

O 4. If a teen-ager doesn't eat enough, her parents can just make her eat.

O 5. A teen-ager who won't eat is simply a spoiled brat.

6. If someone pays you a compliment (says something nice about you) the best way to reply is:
O a. "Oh sure, I'm the greatest"
O b. "I guess I'm just lucky"
O c. "I wish that were true"
O d. "Thank you"
O e. "But you are better than I am"
(There is only one correct answer for this question.)

O 7. It's possible to change something about yourself by imagining that the change you want has already happened.

Items 8-14: fill in the circle which corresponds to your opinion.

Items 8-14: fill in the circle which corresponds to your opinion.

	AGREE	DON'T KNOW	DISAGREE
8. It's O.K. to make mistakes while you're learning to do something new.	O	O	O
9. Advertizers encourage us to eat, even when we're not hungry.	O	O	O
10. Boys who have a heavy build are attractive, but girls who are heavy are not attractive.	O	O	O
11. How we think we look makes a big difference to how we feel about ourselves.	O	O	O
12. Women have to be slim to be good at a career.	O	O	O
13. Boys and girls in grade 8 should already know what they want to do in life.	O	O	O
14. It's really important that girls wear stylish clothes.	O	O	O

SOCIO-CULTURAL INFLUENCES --scoring key(Grades 7&8)

Place the appropriate column of this key against the student's answers.
Matching O's or ●'s - a correct answer.
Mark items 1-7 out of 10.
Mark items 8-14 out of 14.
(0 for undesired attitude;
1 point for "Don't Know";
2 points for desired attitude).

● 1.

O 2.

3.
● a.
● b.
O c.
● d.
● e.
O f.

O 4.

O 5.

6.

O a.
● b.
O c.
O d.
O e.

O 7

	AGREE	DON'T KNOW	DISAGREE
8.	●	O	O
9.	●	O	O
10.	O	O	●
11.	●	O	O
12.	O	O	●
13.	O	O	●
14.	O	O	●

S I

DO YOU FEEL LIKE THIS	Often	Sometimes	Never
1. Afraid to refuse a favour -- to anyone	—	—	—
2. You have to do everything perfectly to be O.K.	—	—	—
3. Under pressure to be the kind of child your parents want, to be loved and accepted	—	—	—
4. Everyone expects too much of you	—	—	—
5. You want to shout or cry -- for no real reason	—	—	—
6. Frustrated -- want to leave school and try work	—	—	—
7. Guilty when your peer group gets in trouble -- even though you didn't do anything wrong	—	—	—
8. You wish you were like someone else who is in some way better than you	—	—	—
9. Scared of choosing next year's courses -- and maybe making a big mistake	—	—	—
10. You have so much, and others have so little; you should do something to earn it	—	—	—
11. Anxious about being accepted by your friends	—	—	—
12. Nervous about meeting new people or trying new things	—	—	—
13. You wish someone would give you guidance	—	—	—
14. You never do anything right	—	—	—
15. Resentful towards your parents for always telling you what to do	—	—	—
16. Worried because you don't yet know what you want to be	—	—	—

S 5

IN AN AFFLUENT SOCIETY FOOD IS PUT TO MANY USES BESIDES GIVING THE BODY WHAT IT NEEDS . . .

WHAT DOES FOOD STAND FOR IN YOUR FAMILY?

Check the column which seems most appropriate for you.

	Yes	No
1. AN EXPRESSION OF LOVE . . . "I want to make a blueberry pie; you all enjoy it so much."	___	___
2. OR ANGER. "I'm sorry I burned your dinner (but not really)."	___	___
3. A PUNISHMENT "Stop crying or I won't buy you any ice cream."	___	___
4. A REWARD "After you've cut the grass, we'll have pop and cookies."	___	___
5. A BRIBE "We'll get some popcorn if you'll be good during the show."	___	___
6. A MEANS OF CELEBRATION "It's his birthday - we'll surprise him with snacks and drinks and a cake!"	___	___
7. A MEANS OF SOCIALIZING "It's two years since we've seen them - we're going out to dinner together."	___	___
8. A PHYSICAL CRUTCH "I'm tired - I'll stop and have a milkshake."	___	___
9. AN EMOTIONAL CRUTCH "I'm bored - I'll stop and have a milkshake."	___	___
10. A DELAYING TACTIC "I'll have a snack first - then I'll start my homework."	___	___
11 AN EXPRESSION OF DIFFERENCE OR SUPERIORITY "You're not going to eat that - yuch!"	___	___

H 1

HOW I FEEL MY BODY IS NOW . . .

	Definitely	Somewhat	Not at all
1. Healthy	—	—	—
2. Strong	—	—	—
3. Well coordinated	—	—	—
4. Flexible	—	—	—
5. Has endurance	—	—	—
6. Trim	—	—	—
7. Graceful	—	—	—
8. Tall	—	—	—
9. Petite	—	—	—
10. With flawless complexion	—	—	—
11. Relaxed	—	—	—
12. Attractive	—	—	—

H 2

HOW I WOULD LIKE MY BODY TO BE . . .

	Very much	Somewhat	Not important
1. Healthy	—	—	—
2. Strong	—	—	—
3. Well coordinated	—	—	—
4. Flexible	—	—	—
5. Having endurance	—	—	—
6. Trim	—	—	—
7. Graceful	—	—	—
8. Tall	—	—	—
9. Petite	—	—	—
10. With flawless complexion	—	—	—
11. Relaxed	—	—	—
12. Attractive	—	—	—

H 12

HOW MUCH DO YOU VALUE SLIMNESS?

Check the column which seems most appropriate for you.

	Yes	Don't know	No
1. If you felt you were getting overweight, would you diet or exercise more, in order to get back to "normal"?	—	—	—
2. Would you choose a slim girlfriend before a heavy girlfriend, even though the heavy girl is more interesting to be with?	—	—	—
3. If your girlfriend or fiancée began to gain weight, would you tell her she should go on a diet?	—	—	—
4. Have you ever teased someone about being overweight?	—	—	—
5. If your mother or sister put on 6-8 kg over her normal weight, would you criticize her for this?	—	—	—
6. If your father or brother put on 6-8 kg over his normal weight, would you criticize him for this?	—	—	—
7. If your mother or sister *lost* 4-8 kg off her normal weight, would you criticize her for this?	—	—	—
8. If your father or brother *lost* 4-8 kg off his normal weight, would you criticize him for this?	—	—	—

Nom _____

Niveau _____

Date _____

TEST: LES INFLUENCES SOCIO-CULTURELLES (7e et 8e années)

Items de 1 à 7: remplir le cercle pour les affirmations qui, à votre avis, sont vraies.

O 1. L'anorexie nerveuse est une maladie au cours de laquelle la personne se prive de manger.

O 2. La boulimie est une maladie qui fait dormir la personne qui en souffre.

3. Lesquels de ces facteurs vous rendraient le plus sujet à l'anorexie?

O a. tu es une personne qui souhaite plaire aux autres
O b. quelqu'un que tu aimes meurt
O c. tes parents ne préparent pas ton déjeuner ou ton lunch
O d. tes parents sont très sévères
O e. tu aimes faire tout ce que tu entreprends à la perfection
O f. tu as beaucoup de frères et soeurs
(Il y a plus qu'une seule bonne réponse à cette question)

O 4. Si une adolescente ne mange pas, ses parents peuvent la forcer.

O 5. Une adolescente qui refuse de manger est une enfant gâtée.

6. Si quelqu'un te fait un compliment (dit quelque chose de gentil ton sujet), la meilleure façon de répondre est:

O a. "Oui, oui, je suis le/la meilleur(e)"
O b. "Je suppose que je suis simplement chanceuse"
O c. "J'aimerais bien que cela soit la vérité"
O d. "Merci"
O e. "Mais tu es bien meilleur(e) que moi"
O (Il n'y a qu'une seule bonne réponse à cette question.)

O 7. Il est possible de changer quelque chose en toi en imaginant qu le changement auquel tu rêves s'est déjà produit.

Items 8 à 14: remplir le cercle qui correspond à ton opinion.

	OUI	JE NE SAIS PAS	NON
8. Il est permis de faire des erreurs quand on apprend quelque chose de nouveau.	O	O	O
9. Les publicitaires nous encouragent à manger, même si nous n'avons pas faim.	O	O	O
10. Les garçons munis d'une charpente solide sont beaux, mais les filles qui possèdent une charpente solide ne sont pas jolies.	O	O	O
11. L'impression que nous avons de notre apparence influence beaucoup notre amour de soi.	O	O	O
12. Les femmes doivent être minces pour exceller dans une carrière.	O	O	O
13. Les garçons et les filles de 8e année devraient déjà savoir ce qu'ils vont choisir comme carrière.	O	O	O
14. Il est très important que les filles portent des vêtements à la mode.	O	O	O

S I

AS-TU CETTE IMPRESSION	Souvent	Quelquefois	Jamais
1. Tu as peur de refuser une faveur, à n'importe qui	___	___	___
2. Tu dois tout faire parfaitement pour être O.K.	___	___	___
3. Tu sens que tu dois être l'enfant que souhaitent tes parents, pour être aimé(e) et accepté(e)	___	___	___
4. Tout le monde en attend trop de toi	___	___	___
5. Tu as envie de crier ou pleurer, sans raison véritable	___	___	___
6. Tu es frustré(e); tu voudrais quitter l'école et entrer sur le marché du travail	___	___	___
7. Tu te sens coupable lorsque tes amis sont dans le pétrin, même si tu n'as rien fait de mal	___	___	___
8. Tu aimerais être comme quelqu'un d'autre qui, d'une certaine façon, est meilleur(e) que toi	___	___	___
9. Tu hésites à choisir tes cours pour l'an prochain, car tu crains de faire une grosse erreur	___	___	___
10. Tu possèdes tellement, alors que d'autres possèdent si peu; tu te sens obligé(e) de faire quelque chose pour mériter cela.	___	___	___
11. Tu désires profondément être accepté(e) par tes amis	___	___	___
12. Tu es nerveux(se) à l'idée de rencontrer de nouvelles personnes ou d'entreprendre de nouvelles activités	___	___	___
13. Tu aimerais que quelqu'un t'aide dans tes décisions	___	___	___
14. Tu ne fais jamais rien de bien	___	___	___
15. Tu es irrité(e) par tes parents qui te disent toujours quoi faire	___	___	___
16. Tu te fais du souci parce que tu n'es pas encore certain(e) de la carrière qui t'intéresse	___	___	___

S 5

DANS UNE SOCIETE D'ABONDANCE COMME LA NÔTRE, LA NOURRITURE EST UTILISEE A PLUSIEURS FINS AUTRES QUE CELLE DE FOURNIR AU CORPS CE DONT IL A BESOIN . . .

QUÉ REPRÉSENTE LA NOURRITURE DANS TA FAMILLE?

Coche la colonne qui te semble la plus appropriée.

	Oui	Non
1. UNE MANIÈRE D'EXPRIMER L'AMOUR . . . "Je veux faire une tarte aux bleuets; tu aimes tellement ça."	___	___
2. . . . OU LA COLÈRE. "Je suis désolé(e) d'avoir brûlé ton repas (mais pas vraiment)."	___	___
3. UNE PUNITION "Arrête de pleurer sinon je ne t'achète pas de crème glacée."	___	___
4. UNE RECOMPENSE "Quand tu auras fini de tondre le gazon, on prendra une boisson gazeuse et des biscuits."	___	___
5. UNE FORME DE CHANTAGE "On achètera du maïs éclaté si tu es sage durant le spectacle."	___	___
6. UNE MANIÈRE DE CELEBRER "C'est son anniversaire de naissance; nous allons lui faire une surprise avec des friandises, des boissons et un gâteau!"	___	___
7. UNE FAÇON DE PASSER LE TEMPS AVEC DES AMIS "Nous ne les avons pas vus depuis deux ans; prenons un repas ensemble."	___	___
8. UN APPUI PHYSIQUE "Je suis fatigué(e). J'arrête quelques minutes pour boire un Coke."	___	___
9. UN APPUI ÉMOTIONNEL "Je m'ennuie. J'arrête quelques minutes pour boire un Coke."	___	___
10. UNE TACTIQUE POUR REMETTRE UN TRAVAIL À PLUS TARD "Je prends mon casse-croûte d'abord, puis je commence mes devoirs."	___	___
11 UNE FAÇON D'EXPRIMER UNE OPINION CONTRAIRE OU LA SUPERIORITE "Tu ne vas pas manger ça . . . wouach!"	___	___

H 1

PRÉSENTEMENT, JE CROIS QUE MON CORPS EST . . .

	Assurément	Relativement	Pas du tout
1. Sain	___	___	___
2. Vigoureux	___	___	___
3. Bien coordonné	___	___	___
4. Flexible	___	___	___
5. Énergique	___	___	___
6. Soigné	___	___	___
7. Gracieux	___	___	___
8. Grand	___	___	___
9. Petit	___	___	___
10. Ma peau est propre	___	___	___
11. Reposé	___	___	___
12. Attrayant	___	___	___

H 2

J'AIMERAIS QUE MON CORPS SOIT . . .

	Assurément	Relativement	Pas important
1. Sain	—	—	—
2. Vigoureux	—	—	—
3. Bien coordonné	—	—	—
4. Flexible	—	—	—
5. Énergique	—	—	—
6. Soigné	—	—	—
7. Gracieux	—	—	—
8. Grand	—	—	—
9. Petit	—	—	—
10. Ma peau est propre	—	—	—
11. Reposé	—	—	—
12. Attrayant	—	—	—

APPENDIX C

Pretests and Posttests - High School

Name _____

Grade _____
Date _____

TEST QUESTIONS: DIET AND EATING DISORDERS

Items 1-20: fill in the circle for statements which you think are true.

O 1. People suffer from anorexia nervosa and bulimia in all countries of the world.

2. Women are usually most dissatisfied with the appearance of their:
O a. face
O b. body above the waist
O c. body below the waist
O d. legs above the knees
O e. legs below the knees
O f. b and c
O g. c and d
O h. a and e

O 3. Fashion models are usually a normal, healthy weight for their height.

4. In respect to body fat:
O a. it provides a compact store of energy
O b. its only use is to keep us warm
O c. women need less of it than men
O d. it should be about 10% of a woman's body weight

O 5. Between ages 10 and 12, on average, girls grow 12 cm (4.5 inches) taller and gain 8 kg (18 pounds) in weight.
Between ages 12 and 18, on average, they grow 11 cm (4 inches) taller and gain 14 kg (32 pounds) in weight.

O 6. A person really doesn't have much control over how much he/she can weigh and remain healthy; it's largely determined by heredity.

O 7. We only eat when we're hungry.

8. When dieting to lose weight, a teen-age girl who is *petite* in build should not consume less than:

O a. 600 calories a day
O b. 800 calories a day
O c. 1000 calories a day
O d. 1200 calories a day

O 9. The best way to lose weight is just to eat one meal a day.

O 10. The quicker you can lose weight, the better.

O 11. Some foods, like grapefruit, help you to "melt" your body fat away.

O 12. A very high protein diet is healthy.

O 13. It's a good idea to combine exercise with dieting, to lose weight.

O 14. Diet pills prescribed by a doctor are safe for everyone.

O 15. Most popular diets which are written up in books and magazines should not be continued for too long a period.

16. People who are thin:

O a. are always better at sports than heavier people
O b. must eat less than heavier people
O c. used to be considered less attractive than heavier people

17. Bulimia is an illness which causes people to:

O a. eat small quantities of food often
O b. force themselves to vomit after eating
O c. abuse laxatives, in the belief that this will prevent the food being digested.
O d. sleep a lot
O e. a and b
O f. b and c
O g. c and d

O 18. An anorexic knows she is ill and will readily seek medical help.

O 19. When people are angry, they always know it.

O 20. Many illnesses are the result of being unhappy about one's situation in life.

3

Items 21-26: fill in the circle which corresponds to your opinion.

	AGREE	DON'T KNOW	DISAGREE
21. It's only natural and healthy for a girl to worry if she can't wear clothing which is size 11 or less.	O	O	O
22. Girls and women who are thin look good whatever they are wearing.	O	O	O
23. Lots of people try out crash diets and diet aids, but they should see their doctor first.	O	O	O
24. Anorexia nervosa is an illness which causes people to starve themselves, but it should be possible to *make* them eat.	O	O	O
25. Bulimia is a good way to eat and keep slim; vomiting isn't pleasant but it doesn't hurt you.	O	O	O
26. It isn't always selfish to insist on doing what I want to do, when other people, like my parents or boyfriend, want me to do something else.	O	O	O

DIET AND EATING DISORDERS -- scoring key

Place the appropriate column of this key against the student's answers.
Matching O's or ●'s - a correct answer.
Mark items 1-20 out of 20.
Mark items 21-26 out of 12.
(0 for undesired attitude;
1 point for "Don't Know";
2 points for desired attitude).

O 1.

2.
O a.
O b.
O c.
O d.
O e.
O f.
● g.
O h.

O 3.

4.
● a.
O b.
O c.
O d.

● 5.

● 6.

O 7.

8. O a.
O b.
O c.
● d.

O 9.

O 10.

O 11.

O 12.

● 13.

O 14.

● 15.

16.
O
O
●

17.
O a.
O b.
O c.
O d.
O e.
● f.
O g.

O 18.

O 19.

● 20.

FOLD ALONG THIS LINE TO MARK PAGE 2

	AGREE	DON'T KNOW	DISAGR
21.	O	O	●
22.	O	O	●
23.	●	O	O
24.	O	O	●
25.	O	O	●
26.	●	O	O

H 1

HOW I FEEL MY BODY IS NOW . . .

	Definitely	Somewhat	Not at all
1. Healthy	—	—	—
2. Strong	—	—	—
3. Well coordinated	—	—	—
4. Flexible	—	—	—
5. Has endurance	—	—	—
6. Trim	—	—	—
7. Graceful	—	—	—
8. Tall	—	—	—
9. Petite	—	—	—
10. With flawless complexion	—	—	—
11. Relaxed	—	—	—
12. Attractive	—	—	—

H 2

HOW I WOULD LIKE MY BODY TO BE . . .

	Very much	Somewhat	Not important
1. Healthy	—	—	—
2. Strong	—	—	—
3. Well coordinated	—	—	—
4. Flexible	—	—	—
5. Having endurance	—	—	—
6. Trim	—	—	—
7. Graceful	—	—	—
8. Tall	—	—	—
9. Petite	—	—	—
10. With flawless complexion	—	—	—
11. Relaxed	—	—	—
12. Attractive	—	—	—

H 12

HOW MUCH DO YOU VALUE SLIMNESS?

Check the column which seems most appropriate for you.

	Yes	Don't know	No
1. If you felt you were getting overweight, would you diet or exercise more, in order to get back to "normal"?	___	___	___
2. Would you choose a slim girlfriend before a heavy girlfriend, even though the heavy girl is more interesting to be with?	___	___	___
3. If your girlfriend or fiancée began to gain weight, would you tell her she should go on a diet?	___	___	___
4. Have you ever teased someone about being overweight?	___	___	___
5. If your mother or sister put on 6-8 kg over her normal weight, would you criticize her for this?	___	___	___
6. If your father or brother put on 6-8 kg over his normal weight, would you criticize him for this?	___	___	___
7. If your mother or sister *lost* 4-8 kg off her normal weight, would you criticize her for this?	___	___	___
8. If your father or brother *lost* 4-8 kg off his normal weight, would you criticize him for this?	___	___	___

Nom_____

Niveau_____

Date_____

QUESTIONS: LES RÉGIMES ET LES TROUBLES ALIMENTAIRES

Items de 1 à 20: remplir le cercle des affirmations qui, à votre avis, sont vraies.

O 1. Les gens de partout au monde souffrent d'anorexie nerveuse et de boulimie.

2. Les femmes sont généralement insatisfaites de l'apparence de:

O a. leur visage
O b. leur corps, au-dessus de la taille
O c. leur corps, au-dessous de leur taille
O d. leurs jambes, au-dessus des genoux
O e. leurs jambes, au-dessous des genoux
O f. b et c
O g. c et d
O h. a et e

O 3. Les mannequins sont généralement à un poids normal et sain compte tenu de leur grandeur.

4. La graisse du corps:

O a. emmagasine l'énergie
O b. ne sert qu'à garder le corps au chaud
O c. les femmes ont besoin de moins de graisse que les hommes
O d. devrait représenter environ 10% du poids d'une femme

O 5. Entre 10 et 12 ans, en moyenne, les filles grandissent de 12 cm (4,5 po) et gagnent 8 kg (18 livres).
Entre 12 et 18 ans, en moyenne, elles grandissent de 11 cm (4 po) et gagnent 14 kg (32 livres).

O 6. Une personne ne peut pas vraiment contrôler le poids qui lui est nécessaire pour demeurer en bonne santé; ce facteur est en grande partie héréditaire.

O 7. Nous ne mangeons que lorsque nous avons faim.

8. Lorsqu'elle se met au régime pour perdre du poids, une adolescente munie d'une petite charpente ne devrait pas absorber moins que:

O a. 600 calories par jour
O b. 800 calories par jour
O c. 1 000 calories par jour
O d. 1 500 calories par jour

O 9. La meilleure façon de perdre du poids est de manger seulement un repas par jour.

O 10. Il vaut mieux perdre du poids rapidement que lentement.

O 11. Certains aliments, tels les pamplemousses, aident à faire "fondre" la graisse du corps.

O 12. Un régime à haute teneur en protéines est sain.

O 13. C'est une excellente idée de combiner exercice et régime pour perdre du poids.

O 14. Les pilules amaigrissantes prescrites par les médecins sont sûres pour tout le monde.

O 15. La plupart des régimes populaires décrits dans les livres et les revues ne devraient pas être suivis pendant trop longtemps.

16. Les personnes minces:

O a. sont toujours meilleures dans les sports que les personnes plus grosses
O b. doivent moins manger que les personnes plus grosses
O c. étaient autrefois considérées moins attrayantes que les personnes plus grosses

17. La boulimie est une maladie au cours de laquelle la personne:

O a. mange des petites quantités de nourriture, souvent
O b. se force à vomir après avoir mangé
O c. prend trop de laxatifs, croyant qu'ils empêchent la digestion des aliments absorbés
O d. dort beaucoup
O e. a et b
O f. b et c
O g. c et d

O 18. L'anorexique sait qu'elle est malade et demande l'aide des médecins.

O 19. Les personnes savent toujours si elles sont fâchées.

O 20. De nombreuses maladies résultent du sentiment qu'a une personne d'être malheureuse dans la vie.

Items de 21 à 26: remplir le cercle qui correspond à votre opinion.

	OUI	JE NE SAIS PAS	NON
21. Il est très sain et très naturel qu'une femme soit inquiète de ne pas pouvoir porter des vêtements de taille 11 ou moins.	O	O	O
22. Les filles et femmes minces paraissent bien dans tout ce qu'elles portent.	O	O	O
23. Beaucoup de gens essaient les régimes-chocs et aides mais devraient d'abord consulter leur médecin.	O	O	O
24. L'anorexie nerveuse est une maladie au cours de laquelle le personne se force à l'inanition; cependant, il doit être possible de les <u>forcer</u> à manger.	O	O	O
25. La boulimie est une excellente façon pour manger et rester mince; les vomissements ne sont pas agréables mais ne font aucun mal.	O	O	O
26. Ce n'est pas toujours égoiste d'insister à faire ce que <u>je</u> veux vraiment faire alors que les autres, comme mes parents ou mon ami, veulent que j'agisse autrement.	O	O	O

H I

PRÉSENTEMENT, JE CROIS QUE MON CORPS EST . . .

	Assurément	Relativement	Pas du tout
1. Sain	—	—	—
2. Vigoureux	—	—	—
3. Bien coordonné	—	—	—
4. Flexible	—	—	—
5. Énergique	—	—	—
6. Soigné	—	—	—
7. Gracieux	—	—	—
8. Grand	—	—	—
9. Petit	—	—	—
10. Ma peau est propre	—	—	—
11. Reposé	—	—	—
12. Attrayant	—	—	—

H 12

QUELLE IMPORTANCE ACCORDES-TU À LA MINCEUR?

Coche la colonne qui te semble la plus appropriée.

	Oui	Je ne sais pas	Non
1. Si tu avais l'impression de gagner trop de poids, choisirais-tu de suivre un régime et de faire plus d'exercice afin de revenir à la "normale"?	—	—	—
2. Choisirais-tu une amie mince par rapport à une fille qui serait grasse, même si la fille grasse est plus intéressante que la fille mince?	—	—	—
3. Si ton amie ou ta fiancée commençait à gagner du poids, lui dirais-tu qu'elle devrait suivre un régime?	—	—	—
4. T'es-tu déjà moqué d'une personne parce qu'elle était grasse?	—	—	—
5. Si ta mère ou ta soeur était entre 6 et 8 kg au-dessus de son poids normal, la critiquerais-tu pour cela?	—	—	—
6. Si ton père ou ton frère était entre 6 et 8 kg au-dessus de son poids normal, le critiquerais-tu pour cela?	—	—	—
7. Si ta mère ou ta soeur **perdait** entre 4 et 8 kg, la critiquerais-tu pour cela?	—	—	—
8 Si ton père ou ton frère **perdait** entre 4 et 8 kg, le critiquerais-tu pour cela?	—	—	—

H 2

J'AIMERAIS QUE MON CORPS SOIT . . .

	Assurément	Relativement	Pas important
1. Sain	___	___	___
2. Vigoureux	___	___	___
3. Bien coordonné	___	___	___
4. Flexible	___	___	___
5. Énergique	___	___	___
6. Soigné	___	___	___
7. Gracieux	___	___	___
8. Grand	___	___	___
9. Petit	___	___	___
10. Ma peau est propre	___	___	___
11. Reposé	___	___	___
12. Attrayant	___	___	___

LES RÉGIMES ET LES TROUBLES ALIMENTAIRES: POINTAGE

Placer la colonne appropriée de ce guide de pointage sur la feuille de réponses de l'élève.
Réponse correcte: Les symboles O ou ● sont assortis.
Marquer les items de 1 à 20 sur un total de 20.
Marquer les items de 21 à 25 sur un total de 12.

(1 pour attitude non-désirée
1 point pour "Je ne sais pas"
2 points pour attitude désirée.)

O 1.

2.
O a.
O b.
O c.
O d.
O e.
O f.
● g.
O h.

O 3

4.
● a.
O b.
O c.
O d

● 5

● 6

O 7

8. O a.
O b.
O c.
● d.

O 9.

O 10.

O 11.

O 12.

● 13.

O 14.

● 15.

16.
O
O
●

17.
O a.
O b.
O c.
O d.
O e.
● f.
O g.

O 18.

O 19.

● 20.

	OUI	JE NE SAIS PAS	NON
21.	O	O	●
22.	O	O	●
23.	●	O	O
24.	O	O	●
25.	O	O	●
26.	●	O	O

APPENDIX D

Teachers Curriculum Questionnaire

TEACHER'S CURRICULUM EVALUATION SHEET

Name: _____ Date: _____

School: _____ Grade Level: _____

Title of Your Course: _____

Number of Students: Boys _____ Girls _____

1. WHICH TEACHING MATERIALS DID YOU USE? (please check X)

   A. Dieting and Eating Disorders ____
   B. Male Concerns With Eating Disorders ____
   C. Socio-Cultural Background ____
   D. Socio-Cultural Influences ____

2. Would you rate the content as being poor or good? _____
   Please feel free to comment: _____

3. Would you rate the format as being poor or good? _____
   Please feel free to comment: _____

4. Did the pre-post tests cover the content of the lesson plans adequately? YES_____ NO_____

   If not, please list any suggestions_____

5. Were the questions ambiguous or confusing? YES____ NO_____

   If so, please comment_____

6. Do you have any comments regarding the activity sheets? _____

7. Have you found that your attitudes towards dieting, societal pressures, assertiveness, etc. have changed as a result of teaching this material? YES_____ NO_____

If yes, how?_____

8. Do you think students' attitudes, beliefs, and knowledge have changed? YES_____ NO_____

If yes, how?_____

9. Please indicate students' reactions to the curriculum. _____

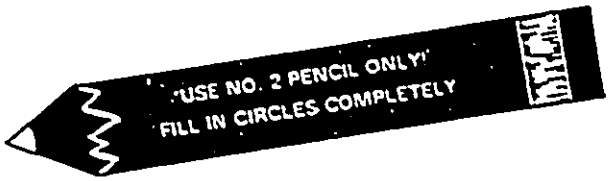
10. Please indicate any problems you encountered in using this curriculum. _____

11. Do you have any additional comments on this resource? _____

APPENDIX E

Ten-Choice Response Sheet

UNIVERSITY OF WINDSOR
GENERAL PURPOSE
TEN-CHOICE RESPONSE SHEET



CORRECT MARKS ●●●●

INCORRECT MARKS ⊘⊗○⊙

NAME (Last, First, M.I.)

IDENTIFICATION

DATE

YR. MO. DAY

Vita Auctoris

Name: Susan Marie Rollinson

Place of Birth: St. John's, Newfoundland

Date of Birth: September 2, 1962

Education: St. John's Central High School, 1974-79

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M.H.K.