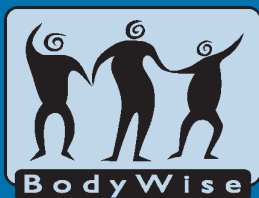
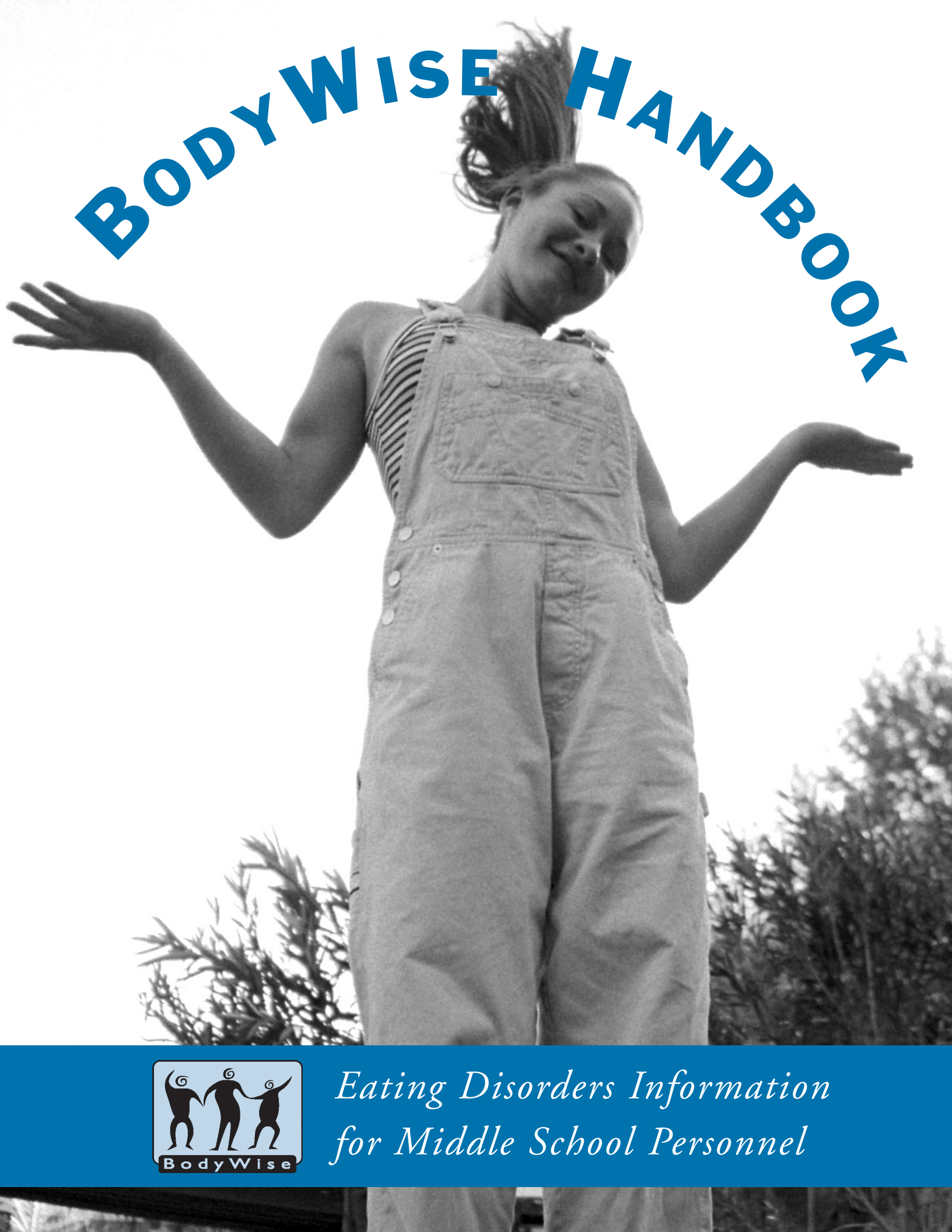
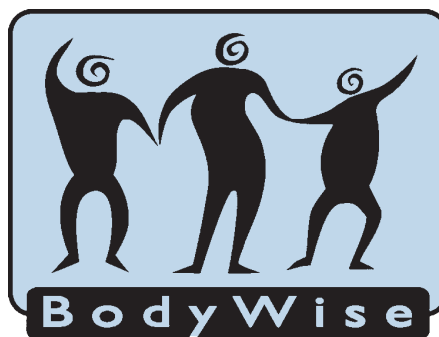


BODYWISE HANDBOOK



*Eating Disorders Information
for Middle School Personnel*



The BodyWise Eating Disorders Information Packet for Middle School Personnel was prepared under U.S. Department of Health and Human Services Program Support Center Contract Number 282-97-00709, Task Order 2, for the Office on Women's Health. Permission to reproduce this document is granted.

Washington, DC: September 1999, 2nd ed. July 2000; 3rd ed. April 2005.

TABLE OF CONTENTS



Introduction	3
Understanding Disordered Eating and Eating Disorders	4
Key Information for School Personnel	7
Eating disorders and disordered eating	7
Disordered eating affects learning	8
Eating disorders as a mental and physical health issue	9
The importance of early detection	11
Members of all ethnic and cultural groups are vulnerable	13
The school community can help prevent eating disorders	14
Using the BodyWise Information Packet	16
Definitions	18



INTRODUCTION

“BodyWise fits beautifully with our Girl Power! mission. Smart eating not only builds healthy bodies, it is linked to better school performance, a more positive self-image, and a brighter future. Recent studies suggest that unhealthy eating practices can begin in children as young as 8 years old. Yet, adults who regularly interact with middle-school-aged children are usually not adequately trained to recognize the potential risk factors, signs, or symptoms of eating disorders or disordered eating.”

—Wanda K. Jones, Dr.P.H.,
Deputy Assistant Secretary for
Health (Women’s Health)

The BodyWise Handbook was developed by the Office on Women’s Health (OWH), of the U.S. Department of Health and Human Services (HHS), as a part of its BodyWise Eating Disorders Initiative. Through this initiative, a packet of materials designed to address eating disorders and disordered eating among pre-adolescents was developed and distributed to school personnel nationwide in the year 2000. These materials have now been updated and revised. A new information sheet on eating disorders and obesity has also been added to the packet.

The BodyWise initiative was developed to provide school personnel and other adults who interact with students ages 9 to 12 with the information and encouragement needed to create environments, policies, and programs that discourage disordered eating. A second objective is to help identify youth who have warning signs of eating disorders. The long-term goal of this initiative is to reduce the risk factors that may contribute to the development of eating disorders and increase factors that may prevent eating disorders among youth, such as self-esteem, positive body image, and empathy.

The materials in this BodyWise Information Packet on Eating Disorders for Middle School Personnel were developed by health communications specialists in partnership with researchers, clinicians, and educators committed to increasing awareness about eating disorders. In addition, school personnel provided input into the development of these materials by participating in focus group meetings conducted by OWH in ethnically and geographically diverse regions of the country.

The BodyWise packet features information specifically directed to adults who work with students in grades five, six, and seven. It addresses the signs and symptoms of eating disorders, steps to take when concerned about students, and ways to create a school environment that discourages disordered eating.

The BodyWise materials seek to connect healthy eating, positive body image, and acceptance of size diversity with favorable learning outcomes. They also encourage school personnel to view disordered eating and eating disorders not in isolation, but in the broader context of health and risk-taking behaviors.

Studies in the last decade show that some disordered eating is related to other health risk behaviors, including tobacco use, alcohol use, marijuana use, delinquency, unprotected sexual activity, and suicide attempts.¹ The information and suggestions provided throughout the BodyWise packet can be easily integrated into your existing curricula and health promotion activities.

The *BodyWise Handbook* is one component of the BodyWise packet. The handbook includes four sections:

- ◆ *Understanding Disordered Eating and Eating Disorders*—An overview of disordered eating and eating disorders, and a brief definition of terms.
- ◆ *Key Information for School Personnel*—Six main messages for school personnel that form the core of the BodyWise initiative.
- ◆ *How To Use the BodyWise Information Packet*—A description of the materials contained within the BodyWise packet and how they can be used by school personnel.
- ◆ *Definitions*—Detailed definitions of eating disorders, including diagnostic criteria from the American Psychiatric Association.

You are encouraged to reproduce the materials in the BodyWise packet and distribute them to other school personnel, parents, and students.

UNDERSTANDING DISORDERED EATING AND EATING DISORDERS

Pre- and early adolescence is a time of physical and psychological change. As young people grow into adulthood, they begin to express their unique identities. Dramatic physical changes—increases in height, weight gains, and sexual maturation—are often accompanied by mood swings, wavering self-esteem, and intense peer pressure.

During these years, young people become increasingly concerned with their appearance. They are exposed to media messages in music, television, and advertising that often promote the ideal female body as thin and the ideal male body as muscular.

Because our society is focused on appearance, body image becomes central to young people's feelings of self-esteem and self-worth—overshadowing qualities and achievements in other aspects of their lives. Young girls start talking about “how they look” and “how much they hate how they look.” They may dwell on the “cellulite” in their legs or their not-flat enough stomach and develop a fear of fat—both in their food and on their bodies.

Young people of all ethnic and cultural backgrounds are subject to the influences of the dominant culture. They may associate success or acceptance by their peers with achieving the “perfect” physical standard portrayed by the media. As a result, boys and girls may adopt extreme forms of exercise and bodybuilding.

As their bodies are developing, students may experience teasing or negative comments about their body size or shape from family or friends. Some may encounter sexual or racial discrimination or harassment. Consequently, they may feel shame, dissatisfaction, embarrassment, rejection, or even hatred toward their growing bodies.

Young people may use food as a way of coping with these types of stresses and other pressures in their lives. Some students may attempt to gain a sense of control by carefully regulating what they eat—eating only certain foods or eating very little. Others may overeat snack foods to reduce stress and relieve anxiety.

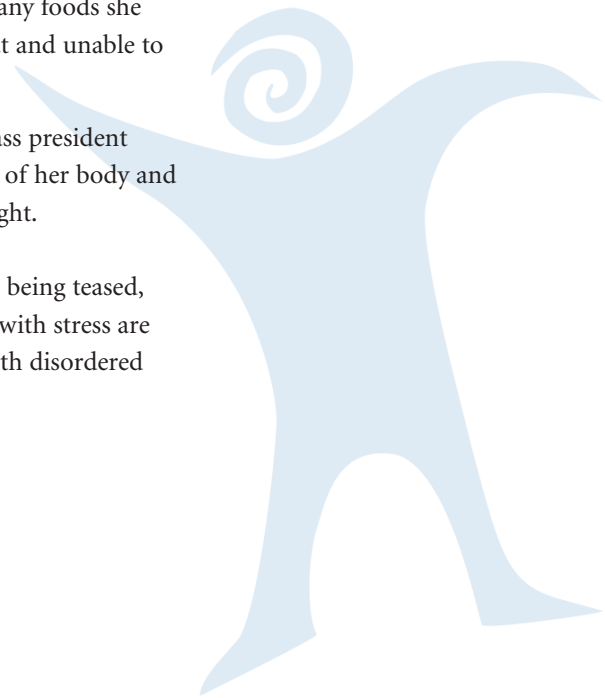
You may be familiar with one or more of the following scenarios:

- ◆ The student who eats only a small amount of each food on her plate because she's afraid of getting fat.
- ◆ The adolescent boy or girl who comes home to an empty house and eats whatever snack foods are available.
- ◆ The young girl who skips breakfast and lunch, has a candy bar and diet soda after school, finds a way to skip the evening meal with her family—and then goes on a secret eating binge in the evening.
- ◆ The wrestler who fasts for 2 days before his match to make weight, then eats nonstop for the next day or two.
- ◆ The dancer, gymnast, or cheerleader who refuses meat, eggs, milk, or any foods she imagines might make her fat and unable to perform.
- ◆ The bright and confident class president who is teased about the size of her body and begins a fad diet to lose weight.

Body dissatisfaction, fear of fat, being teased, dieting, and using food to deal with stress are major risk factors associated with disordered eating.

“My clothes weren’t right. My parents were weird. I didn’t fit in. . . I raised my hand too often at school. . . Then, at age 10, it seemed I woke up to a body that filled the room. Men were staring at me, and the sixth-grade boys snapped the one bra in the class. Home after school, I’d watch TV and pace. Munching chips. Talking to the dog. Staring out the window. Eating macaroni. Eating soup. Eating...”²

—Marya’s Story



DISORDERED EATING BEHAVIORS

Disordered eating encompasses one or more of the following types of behavior:

- ◆ **Skipping meals.**
- ◆ **Restricting food choices to a few “acceptable” items.**
- ◆ **Focusing excessively on avoiding certain foods, particularly foods that contain fat.**
- ◆ **Binge eating, particularly snack foods and sweets.**
- ◆ **Self-induced vomiting.**
- ◆ **Taking laxatives, diuretics (water pills), or diet pills.**

Katie, now 14, was in third grade when she began anorexic behaviors. “I compared myself to others and to the commercials on losing weight. And my mom and my friends’ moms are always talking about dieting. Then one day this boy and I were kidding around and he said, ‘You’re fat.’ That did it. I just stopped eating and I weighed myself all the time. This went on through fourth and fifth grades.” The summer before sixth grade, Katie was put in the hospital.³

DISORDERED EATING

Disordered eating refers to troublesome eating behaviors, such as restrictive dieting, bingeing, or purging, which occur less frequently or are less severe than those required to meet the full criteria for the diagnosis of an eating disorder. Disordered eating has been termed “restrained,” “dysfunctional,” or “emotional” eating, as well as “chronic dieting syndrome.” It can mean not eating enough. It can also mean eating too much, ignoring natural feelings of fullness.

In contrast, normal eating is controlled by an internal system that regulates the balance between food intake and energy expenditures—so that a person usually eats when hungry and stops when full and satisfied. Normal eating is flexible and includes eating for pleasure and social reasons. In normal eating, a person follows regular habits—typically eating three meals a day and snacks to satisfy hunger. Normal eating provides nourishment for the body, increasing energy and strength, and enhancing health and feelings of well-being.⁴

Students engaged in disordered eating may move back and forth across a continuum, returning to normal eating after bouts of dieting or binge eating. Disordered eating can impair a student’s ability to learn when accompanied by undernourishment or preoccupation with thoughts of food, body image, or hunger. Disordered eating can also be an early warning sign of an eating disorder. Susceptible individuals may go on to develop an eating disorder from which they cannot recover on their own.

EATING DISORDERS

An eating disorder is a psychiatric illness with specific criteria that are outlined in the “Diagnostic and Statistical Manual (DSM-IV-TR™)” published by the American Psychiatric Association (see “Definitions” section of this handbook, pages 18 and 19).

Eating disorders have both mental and physical components with serious medical consequences that can disrupt growth and development. Illnesses such as anorexia nervosa, bulimia nervosa, or binge eating disorder are among the key health issues affecting adolescents and young adults. Nine out of every 10 cases are found among girls and young women. All socioeconomic, ethnic, and cultural groups are affected.



Anorexia Nervosa

Approximately one out of every 100 adolescent girls develops anorexia nervosa, a dangerous condition in which people can literally starve themselves to death.⁵ People with this disorder eat very little even though they are already thin. They have an intense and overpowering fear of body fat and weight gain.

Bulimia Nervosa

Another two to five out of every 100 young women develop bulimia nervosa, a pattern of eating followed by behaviors such as vomiting, taking laxatives or diuretics (water pills), or overexercising to rid the body of the food or calories consumed.⁶ People with bulimia nervosa have a fear of body fat even though their size and weight may be normal.

Binge Eating Disorder

Binge eating disorder, characterized by frequent episodes of uncontrolled eating, is probably the most common eating disorder. More than one-third of obese individuals in weight-loss treatment programs report problems with binge eating.⁷ The overeating or bingeing is often accompanied by feeling out of control and followed by feelings of depression, guilt, or disgust.



Sari describes how her eating disorder began. “I was on this diet of 800 calories a day, and I was losing lots of weight. One day I was home alone and I couldn’t get the chips in the kitchen cabinet out of my mind. I ate the whole bag—and then half a package of chocolate-covered graham crackers. I was so sick, I threw up. The next time I went on a binge I felt disgusted with myself, but I didn’t throw up. So I stuck my finger down my throat. It was so easy to keep my behavior a secret. I’d eat normally in front of everyone and binge when my parents were working, so they never heard me vomiting. And I worked out at least 2 hours every day.”⁸

OVEREXERCISING

Overexercising, often practiced by people who have anorexia and bulimia, is exercising frequently, intensely, or compulsively for long periods of time, primarily to compensate for food eaten recently or to be eaten in the near future. A person who overexercises might display one or more of the following characteristics:

- ◆ Exercises more frequently and more intensely than is required for good health or competitive excellence.
- ◆ Gives up time from work, school, and relationships to exercise; likes to exercise alone.

- ◆ Exercises despite being injured or ill.
- ◆ Defines self-worth in terms of athletic performance.
- ◆ Says she or he is never satisfied with a performance or game; does not savor victories.

Overexercising is of particular concern when accompanied by disordered eating, body dissatisfaction, fear of fat, or obsession with weight and food.

KEY INFORMATION FOR SCHOOL PERSONNEL

Eating disorders may begin as disordered eating behaviors at very young ages

Many studies show that disordered eating behaviors begin as early as 8 years of age, with complaints about body size or shape. The Harvard Eating Disorders Center (HEDC) reports that in a study of children ages 8 to 10, approximately half of the girls and one-third of the boys were dissatisfied with their size. Most dissatisfied girls wanted to be thinner, while about half of dissatisfied boys wanted to be heavier and/or more muscular.⁹

Many individuals with clinically diagnosed anorexia nervosa and bulimia nervosa remember being teased or recall that their problems first began when they started dieting. Similarly, they recall experiencing body dissatisfaction and/or fear of fat, even though they were within the natural weight range for their age.



While only a small percentage of people who diet or express body dissatisfaction develop eating disorders, the beginning of an eating disorder typically follows a period of restrictive dieting, a form of disordered eating for youth.

Binge eating disorder is a newly recognized condition that affects millions of people. People with binge eating disorder have varying degrees of obesity. Most have a long history of repeated efforts to diet and feel desperate about their difficulty in controlling food intake. Binge eating behaviors can begin during childhood.

The middle-school years—grades six, seven, and eight—are opportune times to recognize and discourage disordered eating behaviors. Although these behaviors may not constitute a serious illness, they are still unhealthy practices that can affect students' ability to learn. They can also trigger a full-blown eating disorder in a susceptible individual that requires intensive treatment.

SIX KEY BODYWISE MESSAGES

This section summarizes key information for school personnel, which has been organized into six main messages:

- ◆ Eating disorders may begin with disordered eating behaviors at very young ages.
- ◆ Students' ability to learn is affected by disordered eating and eating disorders.
- ◆ The problem of eating disorders is a mental health as well as a physical health issue.
- ◆ Early detection of an eating disorder is important to increase the likelihood of successful treatment and recovery.
- ◆ Students of all ethnic and cultural groups are vulnerable to developing eating disorders.
- ◆ Each member of a school community can help create an environment that discourages disordered eating and promotes the early detection of eating disorders.

These messages form the core of the BodyWise initiative and are included in the BodyWise information sheets.

Students' ability to learn is affected by disordered eating and eating disorders



A review of research compiled by the Tufts University School of Nutrition Science and Policy concludes that undernutrition—even in its “milder” forms—during any period of childhood can have detrimental effects on the cognitive development of children.¹⁰ Undernutrition has an impact on students' behavior, school performance, and overall cognitive development. Undernourished students are hungry. Being hungry—experienced by everyone on occasion—causes irritability, decreased ability to concentrate, nausea, headache, and lack of energy. Students with disordered eating behaviors may experience these sensations every day. Those who attend school hungry have diminished attention spans and may be less able to perform tasks as well as their nourished peers.

Deficiencies in specific nutrients, such as iron, have an immediate effect on students' memory and ability to concentrate. The effects of short-term fasting on academic performance are well

“In our clinical practice we surveyed over 1,000 people with clinically diagnosed eating disorders. We found that people with anorexia nervosa report 90 to 100 percent of their waking time is spent thinking about food, weight, and hunger; an additional amount of time is spent dreaming of food or having sleep disturbed by hunger. People with bulimia nervosa report spending about 70 to 90 percent of their total conscious time thinking about food and

weight-related issues. In addition, people with disordered eating, may spend about 20 to 65 percent of their waking hours thinking about food. By comparison, women with normal eating habits will probably spend about 10 to 15 percent of waking time thinking about food, weight, and hunger.”¹⁵

**—Dan W. Reiff, MPH,
Therapist and Author**

documented. Numerous studies have reported significant improvements in students' academic achievement just from eating breakfast.

When students are not eating well, they can become less active and more apathetic, and interact less with their surrounding environment.¹¹ This in turn affects their social interactions, inquisitiveness, and overall cognitive functioning. In addition, undernourished students are tired and more vulnerable to illness. They are also more likely to be absent from school.

Undernourished students may be preoccupied with thoughts of food and weight.

Students with eating disorders share some of the same physical and psychological symptoms as people who have experienced starvation. For example, preoccupation with food was documented in the Minnesota Human Starvation study¹² and, more recently, has been observed in clinical practices with regard to eating disorders.¹³ One of the major effects of starvation and semistarvation appears to be an obsession with food.¹⁴

“Girls or boys who are self-conscious about their weight and shape, engage in restrictive dieting or excessive exercise, or think of their goals in terms of pounds or fashion models are less interested in and less able to participate in learning.”¹⁶

**—Michael Levine, PhD,
Professor, Department of
Psychology, Kenyon College**

“Although students with eating disorders may display deteriorating school performance, anorexic young women often have perfectionist attitudes which enable them to maintain high levels of academic achievement, despite their being seriously malnourished.”

**—Harold Goldstein, Ph.D.,
Former Clinical Director, Eating
Disorders Program, National
Institutes of Mental Health**

The problem of eating disorders is a mental health as well as a physical health issue

Anorexia nervosa, bulimia nervosa, and binge eating disorder are classified as psychiatric illnesses.

The development of eating disorders involves a complex interaction of factors including personality, genetics, environment (familial, social, and cultural), and biochemistry.¹⁸ Many people with eating disorders also suffer from other psychiatric illnesses, such as depression, anxiety, and obsessive compulsive disorder.

The National Institute of Mental Health reports that many people with eating disorders share certain characteristics such as low self-esteem, feelings of helplessness, and fear of becoming fat. Eating behaviors in people with anorexia nervosa, bulimia nervosa, and binge eating disorder seem to develop as a way of handling stress and anxieties. Those with anorexia nervosa tend to be “too good to be true.” They keep their feelings to themselves, rarely disobey, and tend to be perfectionists, good students, and excellent athletes.

Some researchers believe that people with anorexia nervosa restrict food to gain a sense of control in some area of their lives. Young people with this disease often follow the wishes of others. As a result, they do not learn how to cope with the problems typical of adolescence, growing up, and becoming independent. Controlling their weight may appear to offer two advantages, at least initially: they can take control of their bodies and gain approval from others.

People who develop bulimia nervosa and binge eating disorder typically consume huge amounts of food—often junk food—to reduce stress and relieve anxiety. Feelings of guilt and depression tend to accompany binge eating, while individuals with bulimia nervosa are impulsive and more likely to engage in risky behaviors such as alcohol and drug abuse.

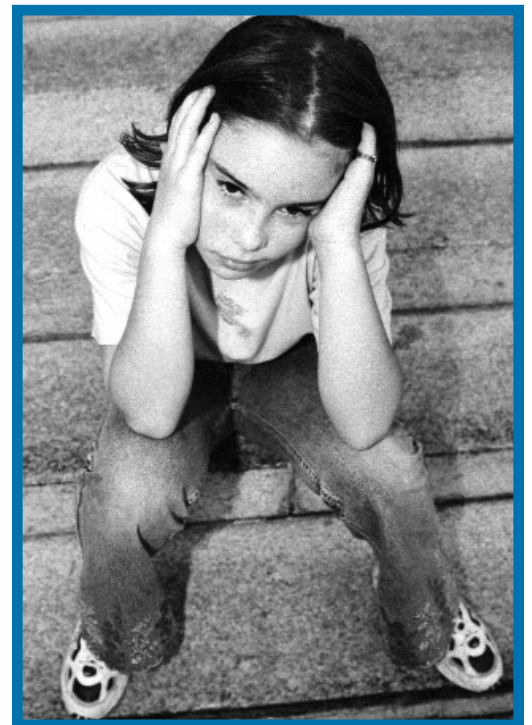
Genetic, behavioral, environmental, and biochemical factors all play a role in the development of eating disorders.

Eating disorders appear to run in families, suggesting that genetic factors may predispose some people to eating disorders. However, other influences may also play a role. Mothers who are overly concerned about their daughters’ weight and physical attractiveness may put the girls at increased risk of developing an eating disorder. In addition, girls with eating disorders often have fathers and brothers who are overly critical of their weight. Some researchers link an increase in the rate of disordered eating to increased pressures on women by the mass media, fashion, and diet industries to pursue thinness.¹⁹

In addition, scientists have studied the biochemical functions of people with eating disorders and found that many of the neuroendocrine system’s regulatory mechanisms are seriously disturbed.²⁰

“At the end of the 20th century, fear of fat, anxiety about body parts, and expectations of perfection in the dressing room have all coalesced to make ‘I hate my body’ into a powerful mantra that informs the social and spiritual life of too many American girls.”¹⁷

—Joan Jacobs Brumberg,
The Body Project



Eating disorders have serious physical consequences that can begin during adolescence.

Adolescence is a time of rapid growth and development. Approximately 90 percent of adult bone mass will be established during adolescence.²¹ Osteoporosis (“porous bones” that break easily) can begin early in both girls and boys who are dieting or suffering from anorexia nervosa. An extended period of starvation or semistarvation stunts growth, can delay the onset of menstruation, and can damage vital organs such as the heart and brain. One in 10 cases of anorexia nervosa leads to death from starvation, cardiac arrest, other medical complications, or suicide.²²

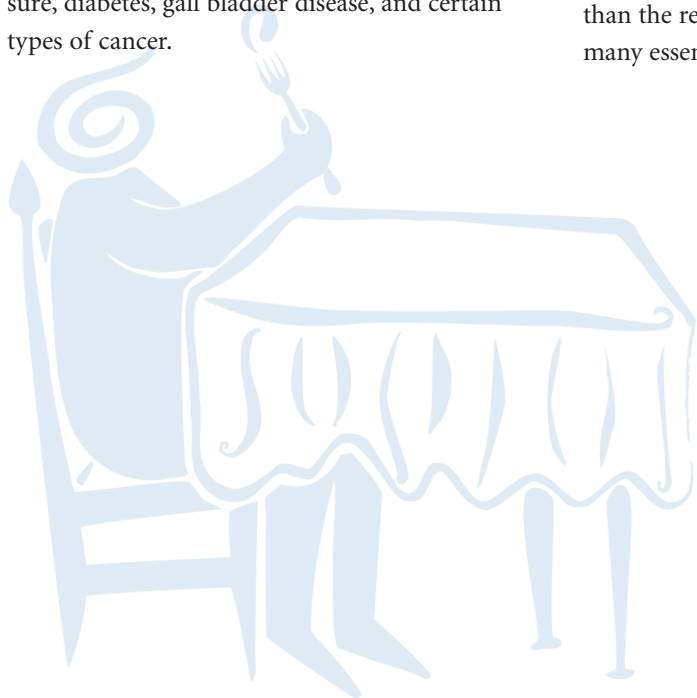
The vomiting that often accompanies bulimia can erode tooth enamel and damage the esophagus. Using laxatives as a form of purging can result in stomach and colon damage. Both anorexia and bulimia can cause fluid and electrolyte abnormalities, including dehydration and a deficiency in potassium resulting in muscle weakness, irritability, apathy, drowsiness, mental confusion, and an irregular heartbeat.

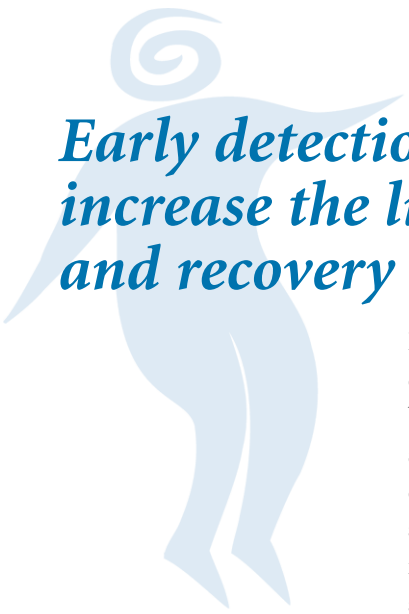
The major complications caused by binge eating disorder are the diseases that accompany obesity, such as heart disease, high blood pressure, diabetes, gall bladder disease, and certain types of cancer.



Students engaged in disordered eating behaviors are not well nourished.

Pre-adolescents need highly nutritious foods to support their rapidly growing and developing bodies. However, students with disordered eating behaviors are likely to consume much less than the recommended daily allowances of many essential nutrients.





Early detection of an eating disorder is important to increase the likelihood of successful treatment and recovery

During adolescence, young people often experience variations in height and weight. A girl or boy who puts on weight before having a growth spurt in height may look plump, while a student who grows taller but not heavier may appear rather thin. These changes should not necessarily be viewed as signs or symptoms of an eating disorder.

You should be concerned about students who:

- ◆ Complain about their bodies or say they are too fat even though they appear to be of normal weight or even rather thin.
- ◆ Talk about being on a diet or avoiding nutritious foods because they are “fattening.”
- ◆ Are overweight and appear sad.
- ◆ Are being teased about their weight.
- ◆ Are spending more time alone.
- ◆ Are obsessed with maintaining low weight to enhance their performance in sports, dance, acting, or modeling.

Students with any of these characteristics may be at an increased risk for developing an eating disorder. You may also want to look for other signs and symptoms of eating disorders, such as those listed on the following page.

Proof is not necessary—having a concern that something may be wrong is enough to initiate a conversation with the student or a family member. School personnel should look for signs of possible problems and act immediately.

If you are concerned about a student, here’s what you can do:

- ◆ Recognize that school personnel do not have the skills to deal with the underlying emotional turmoil that often accompanies eating and exercise problems.
- ◆ Share information with other staff members who know the student. Find out if they have noticed similar signs.
- ◆ Decide together the best course of action and who should talk to the student and family members.

“Middle school personnel are less likely to see students with a fully developed eating disorder, but you may notice students who appear to be rapidly losing or gaining weight. However, it is difficult to ascertain whether weight changes that occur during puberty are normal or are signs of eating disorders.”

—Richard Kreipe, M.D.,
Chief, Adolescent Medicine,
University of Rochester

TALKING TO A STUDENT OR FAMILY MEMBER

When talking with a student or family member, be sure to communicate that you care about her or him. List the specific reasons for your concern and recommend that the student be seen by a health care provider knowledgeable about eating disorders. Say, “let’s find out if there is a problem.” Remain open to further discussion even if the student and/or her or his family do not wish to take your advice right away.

Your goal is to communicate to the student that you care and to refer her or him to a health care provider knowledgeable about eating disorders.

For more information on how to talk to students and family members, see the information sheet, “How To Help a Student.”

SIGNS AND SYMPTOMS OF EATING DISORDERS

In your interactions with students, you may notice one or more of the physical, behavioral, and emotional signs and symptoms of eating disorders.

Physical

- ◆ Weight loss or fluctuation in short period of time.
- ◆ Abdominal pain.
- ◆ Feeling full or “bloated.”
- ◆ Feeling faint, cold, or tired.
- ◆ Dry hair or skin, dehydration, blue hands/feet.
- ◆ Lanugo hair (fine body hair).

Behavioral

- ◆ Dieting or chaotic food intake.
- ◆ Pretending to eat, then throwing away food.
- ◆ Exercising for long periods of time.
- ◆ Constantly talking about food.
- ◆ Frequent trips to the bathroom.
- ◆ Wearing baggy clothes to hide a very thin body.

Emotional

- ◆ Complaints about appearance, particularly about being or feeling fat.
- ◆ Sadness or comments about feeling worthless.
- ◆ Perfectionist attitude.



Your school may consider developing a protocol that provides guidelines on talking with students and family members and making referrals to health care providers knowledgeable about eating disorders. It is also useful to have your principal designate an eating disorders resource person who will become acquainted with local resources for referral.

Treatment can save the life of someone with an eating disorder. Friends, relatives, teachers, and health care providers all play an important role in helping an ill person begin and continue treatment. Early detection of an eating disorder is important to increase the likelihood of successful treatment and recovery.

“I got noticed and was complimented on my weight loss at first, but I got carried away. Then, no one said anything, or if they did, it was only ‘you’re too skinny... eat!’ Had someone said sooner that I needed help, I may have lost only one year to anorexia, instead of six.”²³

—Jill, Age 22

Students of all ethnic and cultural groups are vulnerable to developing eating disorders

“Our body shapes are beautifully different. We need to work hard on self-love and feeling good about who we are on the inside. When we don’t, food becomes too important.”²⁴

—Victoria Johnson,
African American Fitness
Professional

It is a common misperception that eating disorders occur only among white upper-class females. However, recent research has confirmed that eating disorders occur in all socioeconomic groups and also among males and ethnically diverse populations. The causes, warning signs and symptoms, and consequences of eating disorders are similar for all students.

One out of every 10 diagnosed cases of eating disorders occurs in males, which means that hundreds of thousands of young men have eating disorders that cause serious health problems.²⁵

Research on the prevalence of eating disorders among ethnically diverse youth is lacking. However, studies suggest that disturbed eating attitudes and behaviors occur across ethnicity,



and that acculturation toward U.S. societal behaviors, attitudes, and values increases the risk for body dissatisfaction and eating problems among youth.²⁶ Because eating disorders may not be suspected in males or females from ethnically diverse populations, treatment may be delayed until the illness is quite severe.²⁷

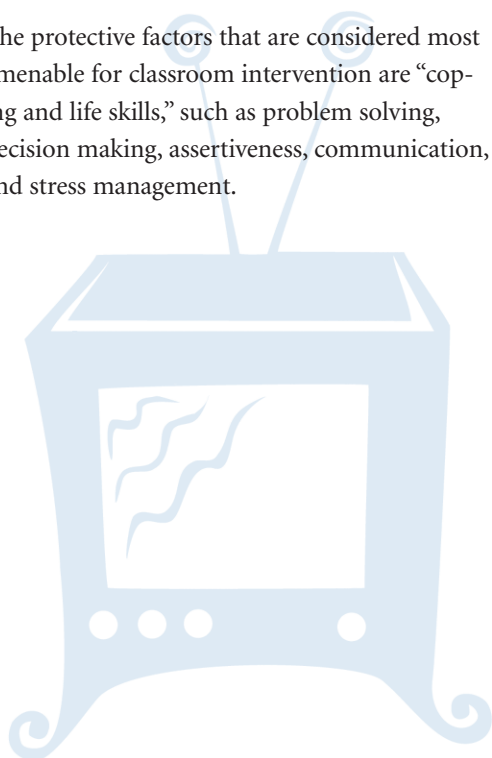
Several information sheets in this packet provide more facts on how eating disorders affect different ethnic and cultural groups, as well as boys.

Why do some students at high risk for health-compromising behaviors successfully navigate adolescence and avoid behaviors that make them vulnerable to poor health and others do not?²⁸

Each member of a school community can help create an environment that discourages disordered eating and promotes the early detection of eating disorders

A study reported in the Journal of the American Medical Association found that of all the forces that influence adolescent health-risk behavior, the most critical are the family and school contexts.²⁹ Both a high expectation for student performance and showing concern for a student's welfare communicate a sense of caring that is one of the major protective factors against a variety of risky behaviors.

The protective factors that are considered most amenable for classroom intervention are “coping and life skills,” such as problem solving, decision making, assertiveness, communication, and stress management.



In traditional Fijian culture, round, robust figures have long been the standard for beauty. The introduction of Western television shows seems to be changing this cultural norm. Harvard researchers conducted a study on Fijian girls and found that from 1995, when broadcast television was introduced, indicators of disordered eating, such as

Media messages that equate thinness with beauty can contribute to development of negative body images among girls. Training in media literacy can help students analyze media messages and resist those that feature thin and unrealistic body shapes.

Other effective strategies include conducting mentoring programs, changing school policies on harassment, and integrating into existing health and science curricula information on growth patterns in puberty and the negative consequences of dieting.

All teachers and staff can serve as personal agents of change, both inside and outside the classroom, to help students avoid disordered eating and other associated risk behaviors. They can accomplish this by providing appropriate information and skills as well as by creating an environment that students perceive to be caring and responsive to their needs.

high EAT-26 scores and reports of self-induced vomiting, dramatically increased over a period of 3 years. Fifty percent of the girls who watched television on three or more nights a week described themselves as unhappy with the size or shape of their bodies or described themselves as “too fat.” These same girls were also more likely to diet than girls who watched less television.³⁰

“When girls in this culture say ‘I feel fat,’ they are trying to tell us they are struggling with self-esteem and identity. They use the term ‘fat’ as a symbolic expression for a wide range of thoughts and feelings that include feeling out of control, anxious, fearful and unworthy.”³¹

—Craig Johnson, Ph.D.,
Director,

Eating Disorders Program,
Tulsa, Oklahoma

A school-based study found that discontent with body weight and shape was directly related to the frequency of reading fashion magazines. Pictures in magazines had a strong impact on girls’ perceptions of their weight and shape. Of the 548 5th- through 12th-grade girls, 69 percent reported that magazine images influenced their idea of the perfect body shape, and 47 percent reported wanting to lose weight because of magazine images.³²

“Providing students with positive coping and life skills education may help in discouraging eating disorders as well as drug, alcohol, pregnancy, and delinquency problems. Changes in parental and teacher attitudes are important, as are changes in school policies concerning harassment, teasing, and being weighed in public.”

—Linda Smolak, Ph.D.,

Professor,
Department of Psychology,
Kenyon College

Answering the following questions will give you a snapshot of your school’s culture and help you think about how you can integrate ways to discourage disordered eating and promote early detection of eating disorders into your school’s ongoing activities.

Do we teach:

- ☐ The nature and dangers of dieting?
- ☐ Weight and size changes that occur during puberty?
- ☐ Genetic effects and diversity of weight and shape?
- ☐ Media literacy skills?
- ☐ Problem-oriented coping skills?
- ☐ Assertive communication skills?
- ☐ Listening skills?

Do we discourage:

- ☐ Calorie-restrictive dieting?
- ☐ Weight- and shape-related teasing?
- ☐ Gender stereotyping?
- ☐ Sexual harassment?

Are we attentive to students who:

- ☐ Express low self-esteem, anxiety, obsessive-compulsiveness, or perfectionism?
- ☐ Say they are too fat?
- ☐ Are teased about their weight or shape?
- ☐ Have a family history of eating disorders, drug abuse, or mental health problems?
- ☐ Experience adverse or stressful life events?

Do we promote:

- ☐ Role models of all sizes and shapes who are praised for accomplishments, not appearance?

- ☐ Definitions of beauty that focus on self-respect, assertiveness, and generosity of spirit?
- ☐ Pathways to success unrelated to external appearance?

Do we offer:

- ☐ Peer support groups?
- ☐ Adult mentoring programs?
- ☐ Opportunities for teachers, students, parents, and others to discuss school policies regarding teasing, bullying, sexual harassment, and gender role constraints?
- ☐ Speakers or in-service programs on eating disorders?
- ☐ Parent education on eating disorders and on how nutrition and positive body image affect learning?
- ☐ Partnerships in which school personnel work with community organizations?
- ☐ Opportunities for students to think critically about mass media and other sociocultural influences on body image and eating?

Does our school:

- ☐ Provide teachers with information about the signs and symptoms of eating disorders?
- ☐ Have a protocol that provides guidelines on the referral of students to health care providers knowledgeable about eating disorders?
- ☐ Have an eating disorders resource person who is acquainted with local and national resources for referral?
- ☐ Have a list of resources for school personnel who may want additional information on eating disorders?

USING THE BODYWISE INFORMATION PACKET

The BodyWise information packet includes a set of materials that you can reproduce and distribute to other school personnel, including teachers, coaches, school nurses, counselors, the principal, and other administrators. We suggest that you keep the originals and make copies for members of your school staff and, as needed, for parents and students.

The packet consists of the items listed below.

INFORMATION SHEETS

Information Sheets for School Personnel

These information sheets provide practical information for teachers, school nurses and counselors, administrators, and physical education teachers, coaches, and dance instructors about disordered eating and eating disorders. Suggestions are provided to enable school personnel to respond effectively to warning signs and help create a positive school culture. The sheets feature quotes and stories that highlight the experiences of students and school personnel. Each sheet concludes with a list of additional available resources.

How To Help a Student

This information sheet provides suggestions on how to approach a student who may have an eating disorder.

How To Help a Friend

Students will often notice the signs of a possible eating disorder before school personnel or parents. This information sheet can be reproduced and given to students who express their concerns about a friend.

Special Student Populations

Information sheets addressing how eating disorders affect boys and ethnically diverse girls are included in the packet to help dispel the myth that eating disorders are only a problem among middle- and upper-income white girls.

Information Sheets for Parents and Other Caregivers

Two information sheets are included for parents. The first provides basic information on eating disorders, how to detect them, and how to discourage disordered eating and support the development of a positive body image. The second, written in Spanish, provides basic information for parents and suggestions on how to seek assistance when concerned about their children. The information sheet also addresses the impact of acculturation and media exposure on the body image and eating behaviors of Hispanic children.

INFORMATION SHEET ON EATING DISORDERS AND OBESITY

This information sheet describes the links between eating disorders and obesity and provides ideas for parents and other adult caregivers on how to promote healthy attitudes and behavior related to eating among adolescents.

RESOURCE SHEETS

The BodyWise packet includes resource sheets developed specifically for middle school personnel. The resource sheets list the following:

- ◆ Professional books for school personnel that discuss girls' health issues and eating disorders and offer specific recommendations relevant for school personnel.
- ◆ Curricular support materials that teachers may use for planning classroom lessons.
- ◆ Young people's reading lists for individual and classroom reading, including both fiction and nonfiction titles.

"Students learn by what they see and hear. Parents and teachers who model good eating behavior reinforce what they learn in class. Students also need the help of school policy makers who affect their environments. Policy makers can ensure that a choice of healthy menu items exists in the school cafeteria and place limits on the access to unhealthy snacks and beverages in vending machines and from fund raising activities."³³

—Kweethai Neill, Ph.D., CHES,
Council for Food and Nutrition,
American School Health
Association

- ◆ Videos on body image, eating disorders, and media literacy that may be used for continuing education for school personnel and shown to middle-school students and family members.
- ◆ Educational organizations that provide information on preadolescent health, eating disorders, and media literacy.

The BodyWise materials are available for downloading from:

www.4woman.org/BodyImage

SUPPLEMENTAL MATERIALS

For more information on women's and adolescent girls' health, refer to Office on Women's Health Web sites listed below.

Office on Women's Health

U.S. Department of Health and Human Services

200 Independence Ave., SW

Washington, D.C. 20201

Tel: (800) 994-9662

TDD: (888) 220-5446

Web sites: www.4woman.gov

www.4girls.gov



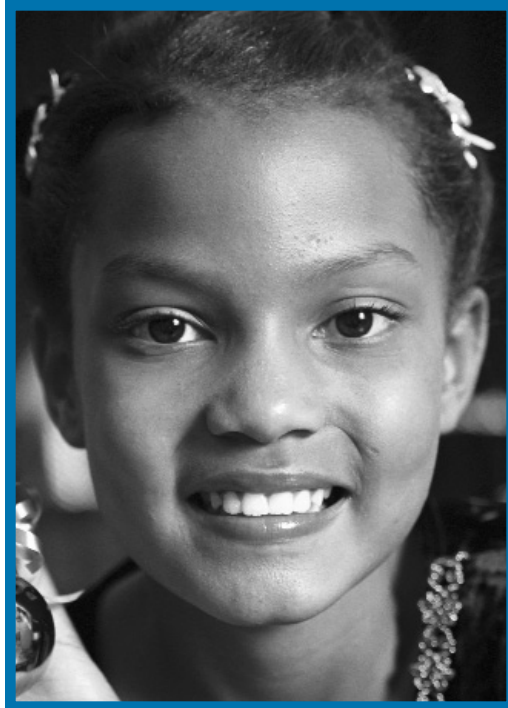
DEFINITIONS

Abnormal eating patterns can vary in severity. It is important to distinguish between the terms “eating disorder” and “disordered eating.”

An ***eating disorder*** is a psychiatric illness with specific criteria that are outlined in the “Diagnostic and Statistical Manual” (DSM-IV-TR™) published by the American Psychiatric Association.

In contrast, ***disordered eating*** has not been strictly defined. For the purposes of this handbook, disordered eating may include the following behaviors, particularly when a student also expresses body dissatisfaction, fear of gaining weight, or feeling anxious or stressed:

- ◆ Skipping meals.
- ◆ Restricting food choices to a few “acceptable” items.
- ◆ Focusing excessively on avoiding certain foods, particularly foods that contain fat.
- ◆ Occasionally bingeing, particularly on snack foods, sweets, and sodas.
- ◆ Self-induced vomiting, or taking laxatives, diuretics (water pills), or diet pills-to lose weight.



ANOREXIA NERVOSA

Anorexia nervosa is characterized by:³⁴

- ◆ Self-induced weight loss or failure to make expected weight gain during periods of growth—resulting in body weight less than 85 percent of that expected.
- ◆ Intense fear or dread of gaining weight or becoming fat—even though underweight.
- ◆ Disturbance in one’s perception of body weight or shape, undue influence of body weight or shape on self-evaluation, or denial that the current low body weight is serious.
- ◆ Amenorrhea in females—onset of menses is delayed or arrested (the absence of at least three consecutive menstrual cycles).

There are two subtypes of anorexia nervosa, namely *restricting* type and *binge-eating/purging* type. Individuals with the restricting subtype accomplish weight loss primarily through dieting, fasting, or excessive exercise. Individuals with the binge-eating/purging subtype regularly engage in binge eating and purge through self-induced vomiting or the misuse of laxatives, diuretics, or enemas. Some people in this subtype do not binge eat, but do purge after eating small amounts of food.

BULIMIA NERVOSA

Bulimia nervosa is characterized by:³⁵

- ◆ Recurrent episodes of binge eating characterized by:
 - Eating in a discrete period of time (e.g., within any 2-hour period) an amount of food that is definitely larger than most individuals would eat under similar circumstances.
 - A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- ◆ Recurrent inappropriate compensatory behavior to prevent weight gain. These behaviors are either:
 - *Purging*: self-induced vomiting or misuse of laxatives, diuretics (water pills), or enemas.
 - *Nonpurging*: fasting or excessive exercise.
- ◆ Binge eating and inappropriate compensatory behaviors that both occur, on average, at least twice a week for 3 months.
- ◆ Self-evaluation that is unduly influenced by body shape and weight.

Bulimia nervosa can occur in those with anorexia nervosa or it can occur as a separate condition.

BINGE EATING DISORDER

Binge eating disorder is characterized by:³⁶

- ◆ Recurrent episodes of binge eating (see definition provided in first bullet under “Bulimia Nervosa” above)
- ◆ The binge eating episode is associated with three (or more) of the following:
 - Eating much more rapidly than normal.
 - Eating until feeling uncomfortably full.
 - Eating large amounts of food when not feeling hungry.

- Eating alone because of being embarrassed by how much one is eating.
- Feeling disgusted with oneself, depressed, or very guilty after overeating.
- Marked distress regarding binge eating is present.
- The binge eating occurs, on average, at least 2 days a week for 6 months.

Binge eating is frequently experienced by people diagnosed with bulimia nervosa and sometimes experienced by people diagnosed with anorexia nervosa. However, binge-eating disorder is not associated with the use of inappropriate compensatory behaviors (e.g., purging, fasting, excessive exercise).

OVEREXERCISING

Overexercising, often practiced by those with anorexia and bulimia, is exercising frequently, intensely, or compulsively for long periods of time in order to control weight. A person who overexercises might display one or more of the following characteristics:

- ◆ Exercises more frequently and more intensely than is required for good health or competitive excellence.
- ◆ Gives up time from work, school, and relationships to exercise.
- ◆ Exercises despite being injured or ill.
- ◆ Defines self-worth in terms of athletic performance.
- ◆ Says she or he is never satisfied with a performance or game; does not savor victories.

Overexercising is of particular concern when accompanied by disordered eating, body dissatisfaction, fear of fat, or obsession with weight and food.

END NOTES

- ¹ Neumark-Sztainer D, Story M, French SA. Covariations of unhealthy weight loss behaviors and other high-risk behaviors among adolescents. *Archives of Pediatric Adolescent Medicine*, 1996, vol. 150, no. 3, pp. 304-308; and National Institute of Mental Health. *Eating disorders*, 1994.
- ² The McKnight Foundation. *The McKnight Foundation program for research and training in the diagnosis, treatment, and prevention of eating disorders*. Minneapolis, MN: Author, 1994, p.9.
- ³ Arbetter, S. The As and Bs of eating disorders. *Current Health*, 1994, vol. 21, no. 1, pp. 6-12. Published with permission from Weekly Reader Corporation.
- ⁴ Berg, F. *Afraid to eat: Children and teens in weight crisis*. Hettinger, ND: Healthy Weight Publishing Network, 1997.
- ⁵ National Institute of Mental Health, *Eating disorders*, 1994; and Piran N, Levine MP, Steiner-Adair C (eds.). *Preventing eating disorders: A handbook of interventions and special challenges*. Philadelphia: Brunner/Mazel, 1999, p. xviii.
- ⁶ Ibid.
- ⁷ Yanovski, S.Z. "Binge eating in obese persons." In Fairburn, C.G., Brownell, K.D. (eds) *Eating Disorders and Obesity 2nd ed*. New York: Guilford Press, 403-407, 2002.
- ⁸ Arbetter, S. The As and Bs of eating disorders.
- ⁹ Harvard Eating Disorders Center Web site www.hedc.org, 1999; and Collins ME. Body figure perceptions and preferences among preadolescent children. *International Journal of Eating Disorders*, 1991, vol. 10, no. 2, pp. 199-208.
- ¹⁰ Tufts University School of Nutrition Science and Policy. Statement on the link between nutrition and cognitive development in children. Boston: Center on Hunger, Poverty and Nutrition Policy, 1998. The statement may be obtained by calling (617) 627-3956.
- ¹¹ Ibid.
- ¹² Keys A, et al. *The biology of human starvation*, vols. 1 and 2. Minneapolis: University of Minnesota Press, 1950 (cited in Reiff & Lampson-Reiff, 1999).
- ¹³ Reiff D, Lampson-Reiff KK. *Eating disorders: Nutrition therapy in the recovery process*. Mercer Island, WA: Life Enterprises, 1999.
- ¹⁴ Ibid.
- ¹⁵ Reiff D, Lampson-Reiff KK. *Eating disorders: nutrition therapy in the recovery process*, p. 285.
- ¹⁶ Personal conversation with Michael Levine, Ph.D., member of the Office on Women's Health Eating Disorders Steering Committee, June 1999.
- ¹⁷ Brumberg JJ. *The body project*. New York: Random House, 1997, p. 130.
- ¹⁸ National Institute of Mental Health. *Eating disorders*, 1994.
- ¹⁹ Nasser M, Katzman M. Eating disorders: Transcultural perspectives inform prevention. In N Piran, MP Levine, C Steiner Adair (eds.), *Preventing eating disorders: A handbook of interventions and special challenges*. Philadelphia: Brunner/Mazel, 1999, p. 28.
- ²⁰ National Institute of Mental Health. NIMH Workshop on Research in Eating Disorders. December 7-8, 1998.
- ²¹ National Institute of Child Health and Human Development. Child and adolescent nutrition fact sheet, May 1998.
- ²² National Institute of Mental Health. *Eating disorders*, 1994.
- ²³ Personal conversation, January 21, 1999.
- ²⁴ Crute S (ed.). *Health and healing for African Americans*. Emmaus, PA: Rodale Press, 1998.
- ²⁵ Andersen AE. Eating disorders in males. In CG Fairburn, KD Brownell (eds.). *Eating disorders and obesity: A comprehensive handbook, 2nd ed*. New York: Guilford Press, 2002, pp.188-192.
- ²⁶ Dounchis JZ, Hayden HA, Wifley DE. Obesity, eating disorders, and body image in ethnically diverse children and adolescents. In JK Thompson, L Smolak (eds.), *Body image, eating disorders and obesity in children and adolescents: Theory, assessment, treatment, and prevention*. Washington, DC: American Psychological Association, 2001, pp.67-98.
- ²⁷ Carlat DJ, Carmargo CA Jr, Herzog DB. Eating disorders in males: A report on 135 patients. *American Journal of Psychiatry*, 1997, vol. 154, no. 9, pp. 1127-1132; Andersen AE. Eating disorders in males. In KD Brownell, CG Fairburn (eds.), *Eating disorders and obesity: A comprehensive handbook*. New York: Guilford Press, 1995; and Root MPP. Disordered eating in women of color. *Sex Roles*, 22(7/8), 525-536, 1990.
- ²⁸ Resnick MD, Bearman PS, Blum RW, Bauman KE, Harris KM, Jones J, Tabor J, Beuhring T, Sieving RE, Shew M, Ireland M, Bearinger LH, & Udry JR. Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. *JAMA*, 1997, vol. 278, no. 10, pp.823-32.
- ²⁹ Ibid.
- ³⁰ Becker AE, Burwell RA, Gilman SE, Herzog DB, Hamburg P. Eating behaviors and attitudes following prolonged exposure to television among ethnic Fijian adolescent girls. *British Journal of Psychiatry*, 2002, vol. 180, pp.509-514; Becker AE. *Body, self, and society: The view From Fiji*. Philadelphia: University of Pennsylvania Press, 1995.
- ³¹ Personal conversation with Craig Johnson, Ph.D, member of the Office on Women's Health Eating Disorders Steering Committee, July 1999.
- ³² Field AE, Cheung L, Wolf AM, Herzog DB, Gortmaker SL, Colditz GA. Exposure to the mass media and weight concerns among girls. *Pediatrics*, 1999, vol. 103, no. 3, p. e36.
- ³³ Personal conversation with Kweethai Neill, Ph.D, member of the Office on Women's Health Eating Disorders Steering Committee, May 1999.
- ³⁴ American Psychiatric Association. *Eating disorders. Diagnostic and statistical manual of mental disorders (4th ed., DSM-IV-TR™)*, 2000.
- ³⁵ Ibid.
- ³⁶ Ibid.

ACKNOWLEDGMENTS

The following persons were involved in the original production of the BodyWise packet in 1999. The packet was reprinted in 2000 and updated in 2005.

Office on Women's Health U.S. Department of Health and Human Services

Wanda K. Jones, Dr.P.H.
*Deputy Assistant Secretary for Health
(Women's Health)*

Jonelle C. Rowe, M.D., M.A.
Medical Advisor, Project Officer

Susan M. Clark, M.A.
Director, Division of Program Management

Carol Krause, M.A.
Director, Division of Communications

Anna L. Kinderman, J.D.
Public Health Analyst

Meena Gupta, M.P.H.
Project Assistant

Steering Committee Members

Jennifer Biely, J.D., *Executive Director*
Eating Disorders Awareness and Prevention,
Inc., Seattle, WA

Jeanine Cogan, Ph.D., *Congressional Fellow*
Office of Representative Diana DeGette
Washington, DC

Steven Crawford, Ph.D., *Associate Director*
St. Joseph Medical Center, Center for Eating
Disorders, Towson, MD

Diana Everett, Ph.D., *Director of Public Affairs*
Texas Association for Health, Physical
Education, Recreation and Dance, Austin, TX

Harold Goldstein, Ph.D., *Clinical Director*
Eating Disorders Program, National Institute
of Mental Health, Rockville, MD

Barbara Hartigan, *Teacher*
Kingswood Oxford Middle School
West Hartford, CT

David Herzog, M.D., *Director*
Harvard Eating Disorders Center, Boston, MA

Craig Johnson, Ph.D., *Director*
Eating Disorders Program at Laureate
Psychiatric Clinic and Hospital, Tulsa, OK

Dean Krahn, M.D., *Chief of Psychiatry*
William S. Middleton Veteran's Hospital
Madison, WI

Richard Kreipe, M.D., *Chief, Division of*
Adolescent Medicine, Children's Hospital at
Strong, Rochester, NY

Michael Levine, Ph.D., *Professor*
Department of Psychology, Kenyon College
Gambier, OH

Anita Sinicrop Maier, M.S.W.,
Executive Director, Pennsylvania Educational
Network on Eating Disorders, Allison Park, PA

Rebecca Manley, *Executive Director*
Massachusetts Eating Disorder Association
Newton, MA

Saralyn Mark, M.D., *Medical Advisor*
Office on Women's Health
Washington, DC

Sabrina Matoff, M.S., *Public Health Analyst*
Health Resources and Services Administration,
Women's Health

Vivian Hanson Meehan, R.N., D.Sc., *President*
National Association of Anorexia Nervosa and
Associated Disorders, Chicago, IL

Charles Murkofsky, M.D., *President*
American Anorexia Bulimia Association, Inc.,
New York, NY

Kweethai Neill, Ph.D., *Professor of Health and*
Kinesiology, Sam Houston State University
Huntsville, TX

Judith Robinson, Ph.D., R.N., *Executive*
Director, National Association of School
Nurses, Scarborough, ME

Catherine Shisslak, Ph.D., *Associate Professor*
Arizona Prevention Center, University of
Arizona, Tucson, AZ

Meg Small, Ph.D., *School Health Advisor*
U.S. Department of Education
Safe and Drug-Free Schools Program
Washington, DC

Linda Smolak, Ph.D., *Professor*
Department of Psychology, Kenyon College
Gambier, OH

Catherine Steiner-Adair, Ed.D., *Director*,
Education, Prevention, and Outreach
Harvard Eating Disorders Center
Boston, MA

Ruth Striegel-Moore, Ph.D., *Chair of*
Psychology, Wesleyan College
Middleton, CT

Mary Vernon, M.D., *Chief*,
Special Populations Program Section,
Centers for Disease Control,
Atlanta, GA

Violet Woo, M.S., M.Ph., *Program Analyst*,
Office of Minority Health, HRSA,
Rockville, MD

Educational Services, Inc.

Mary Lou Rife, Ph.D.
Project Director

Sandy Lundahl, M.P.H.
Catalina Vallejos-Bartlett, M.A.
Health Communications Specialists

Emily Albright
Jill L. Johnson
Chloe Plaunt
Project Assistants

Magdala P. Labre, M.A.
Senior Editor/Graphic Design

Elena Cohen, M.Ed., M.S.W.
Writer, Spanish-Language Materials

Lara Beaudry Byer
Illustrator

Consultants and Reviewers

OWH Regional Women's Health Coordinators

Members of the OWH Minority Women's
Health Panel of Experts

Jocelyn L. Ancheta

Frances Berg, M.S.

Carol Bloom, Ph.D.

Lynne Doner, M.A.

Jennifer Zoler Douchis

Helen A. Hayden, M.A.

Dennis Henning

Niva Piran, Ph.D.

Dan Reiff, M.P.H., R.D.

Kirsten Reitter

Tom Shiltz, M.S.

Denise E. Wilfley, Ph.D.



The Office on Women's Health (OWH) of the U.S. Department of Health and Human Services (HHS) is the Government's focal point for women's health issues. The mission of OWH is to improve the health of women across the life-span by directing, developing, stimulating, and coordinating women's health research, health care services, and public and health professional education and training across HHS agencies and offices; and with other Government agencies, public and private organizations, and consumer and health care professional groups.

