

## WHITE PAPER

**Why “Obesity Prevention” is Making us Fatter, More Poorly Nourished,  
and Less Fit—The Need for a New Paradigm for Weight***Health as a Value vs. Size as a Goal***Kathy J. Kater, LICSW**

A serious erosion of balanced nutrition and physical activity has contributed to increased health risks, medical problems and inflated rates of obesity in recent decades—not only in adults, but in ever-younger children. In response, numerous campaigns with the goal of reversing these trends have been promoted through public and private initiatives. The cover pages of these campaigns and media stories conveying their intention to the public regularly state that the paramount purpose for improving eating and fitness habits is “obesity prevention.” Given the significant health concerns associated with obesity and the increased frequency, this seems logical—*so* logical that any suggestion that this paradigm might be problematic is summarily dismissed. However there is considerable empirical and clinical evidence suggesting that campaigns framed as “obesity prevention” may actually *add to*, rather than diminish poor eating and fitness habits, adverse health consequences and increased fatness.

When it is recognized that solutions to problems inadvertently fuel the flames they were to extinguish—known as an iatrogenic affect—the maxim *first do no harm* is applied and the approach is hopefully aborted. As national “obesity prevention” initiatives deliver messages in hopes of influencing the lifestyle choices of every adult and child in the United States, we must stop and carefully consider the unintended problems this approach has already caused and we must review promising new models for promotion of healthy choices that do not have deleterious effects.

**How can “obesity prevention” be iatrogenic?**

**Obesity is a measurement of size. It is important to acknowledge that campaigns running under the banner of “obesity prevention” inevitably imply “size prevention.”**

**What is wrong with “size prevention?”**

Implicit in messages aimed at preventing (or promoting) a size is the anxiety provoking notion that there is a “right” and a “wrong” size to be. Over the past four decades body comparison based on a “right/wrong” size paradigm has resulted in unprecedented levels of weight stigma, fear of fatness and body dissatisfaction in the American culture.<sup>1-3</sup> Studies show that between 70-80 percent of women are dissatisfied with their size and shape, with most wanting to weigh less, while 40 percent of men would like to decrease weight.<sup>4</sup> Once the province of adults, studies suggest that 70-83 percent of adolescent females want to lose weight and 45 percent of boys and girls in grades

three through six want to be thinner.<sup>5-7</sup> Anecdotally, teachers and parents of kindergartners, first and second graders report they routinely hear students asking “am I fat?”

*While worry about weight is a key risk factor for eating disorders,<sup>8,9</sup> if it helped to stabilize weights for most people, it might be worth sacrificing a relative few for the greater good.*

But despite ubiquitous angst about maintaining or achieving a leaner size and pervasive efforts to “control” weight through manipulation of eating and exercise, the coinciding rate of fatness in Americans has grown exponentially over the same period of time, including among ever younger children.<sup>10,11</sup> Many complex factors have played a part in this, but important new evidence about the role of body dissatisfaction and weight-worry remains starkly absent from conversations about contributing factors:

*Rather than improving health-enhancing habits, body dissatisfaction “predicts the use of behaviors that lead to disordered eating, weight gain, and poorer overall health”<sup>12</sup>*

A significant and growing body of data suggests that in addition to eating disorders, we must now recognize that unhappiness about size and shape, in particular about being or becoming fat, strongly predicts future weight gain and obesity.<sup>13-15</sup> Three inter-related points can help us understand how this works. These same points lead to recommendations for a new paradigm for promoting healthy body image, eating, fitness and weight that reduces weight-stigma, body dissatisfaction and worry about size.

### **How does “size prevention” and “size promotion” contribute to weight gain and poorer health habits, and what should be recommended instead?**

- 1) **Diverse sizes, *even at the extremes*, are not “preventable.” Framing “size prevention” as a goal is inherently stigmatizing of that size and encourages a fear-based response to it.**

BMI is a highly heritable trait. NIH Clinical Guidelines state that genetic influence accounts for as much as 70 percent of the influence for size and shape and predetermines the “wiring” for internal hunger and weight regulatory systems.<sup>16</sup> A host of other internal and external variables outside of our control play a role as well. Legitimate concerns about environmental factors that have led to a rise in the *rate* of obesity do not alter this fact.<sup>17,18</sup> Well fed, metabolically fit bodies with no elevated health markers will come in diverse sizes ranging from very thin to very fat.<sup>19</sup> “Prevention of obesity” is thus an oxymoron.

Implicit in the “wrong-size/right-size” thinking encouraged by “size prevention/promotion” is the idea that if you don’t meet the prescribed standard, you must be doing something wrong. Equally potent is the assumption that if you meet this standard, you must be taking care of yourself—a dangerous supposition that lulls far too many “normal weight” children and adults into complacency about health habits. Messages promoting “size prevention” imply that size is determined by choices and deny what is known about the genetic contribution to weight and the limits to controlling weight through healthy means. What is continually forgotten is that *weight is not a behavior*, and therefore it is not ours to “choose.”

Behaviors—such as how and what we eat, how active or sedentary we are, whether we get enough sleep, and choices that influence stress and therefore stress hormones that influence appetite and weight—are in our power to choose. These will have a definite influence on health, but none is sufficient to determine our size and weight. When children and adults can be motivated to make more positive choices they will be healthier. None the less these healthier people will *still* fall along a natural distribution ranging from very thin to very fat—even obese.

Health promotion rhetoric suggesting that “elimination of obesity” is a reasonable goal encourages the belief if you have optimal lifestyle habits but remain fat (i.e. you are among the “healthy fat”—fully one-third of obese persons),<sup>20,21</sup> *you are still failing*. In the words of a 16 year old obese all-star soccer player with impeccable eating habits:

*“This ‘obesity prevention’ movement makes me feel like they are trying to prevent me!”*

This is not the result anyone wants from our health promotion campaigns, especially for children and youth.

Framing the goal of positive eating and physical fitness as “obesity prevention” stigmatizes and shames a significant number of people. If stigma or fear of stigma worked to motivate positive, long-term choices, we might be on the right road. But a growing body of evidence suggests that weight bias increases vulnerability to depression, low self-esteem, poor body image, maladaptive eating behaviors and exercise avoidance.<sup>22</sup> The clear voices of victims say it best:

*“Growing up I wasn’t fat, but I was chubby and was teased about it. Even though I had friends, it was a nightmare when other kids circled around me on the playground and called me names. Sometimes they pushed me and even knocked me into the lockers. I told my mother and she talked to the teacher, but it didn’t help. I was just fatter than the other kids and that’s disgusting. So my mother took me to Weight Watchers in the fourth grade. I lost about 20 pounds, but then I gained it all back plus some, which really made me hate myself. So then I sort of felt I deserved what I got, and I’ve been at it (dieting/regaining, gaining more) ever since. All I can do is keep trying to lose weight. But now I am fatter than ever and it just proves what a failure I am in this regard.”* (46 year old obese, female CEO of a nationally known company)

The evidence and voices of victims challenge all notions that stigma may be a motivating force for healthy choices. This cannot be overlooked by public health initiatives that are currently driving home the goal of “eliminating” people of significant size.

### **What is needed?**

- Instead of framing “obesity” as the problem and “prevention of obesity” as the goal, campaigns should emphasize increased health risks associated with poor eating and fitness habits without regard to size.
- While increased obesity is one such consequence, the public should be informed that stigmatization of fatness and a weight-focused paradigm are among the adverse socio-cultural factors contributing to this higher rate.

- Messages should educate the public about the inevitability of size diversity, and parents should be warned that rejection of varied sizes and shapes and body dissatisfaction are associated with poorer eating and fitness habits, increased health risks and weight *gain*.
- Messages should stress that the paramount purpose of positive eating and physical activity is *health and vitality for all*. Because this is a new paradigm, public and private campaigns should call on experts who are well-versed in effectively promoting *health vs. size* for help in framing this message in a fresh and compelling way.

## 2. Messages promoting “size prevention” and therefore fear of fatness encourage counterproductive choices for “size reduction.”

Weight-focused messages prompt worry about weight and body dissatisfaction which regularly leads to “dieting” for weight loss. Overwhelming evidence documents that more than 90 percent of weight lost through weight-reduction plans (diets) is regained, with one-third to two-thirds of dieters regaining more weight than they lost. Additional health risks and weight gain are associated with weight cycling (yo-yo dieting).<sup>23-28</sup> Last but not least, dieting is strongly associated with other unhealthy weight control measures, poorer quality of food intake, disordered eating, and is a primary risk factor for dangerous and debilitating eating disorders.<sup>29</sup> Despite this, dieting remains a normative eating style in the American culture.

Once driven primarily by media promotion of the unrealistic “thin ideal,” warnings about rising rates of obesity have added a new level of weight-worry as parents of even “normal weight” children may be told that their kids are “at risk.” If this advice led parents to respond with more health-enhancing choices, it could be effective. But such an informed, level-headed response is not the norm. Instead:

*Parents who view their children as “somewhat” or “very” overweight are more likely to encourage or support them in “dieting for weight loss.” Children whose parents encouraged them to diet were “at nearly twice the odds of being overweight five years later than non-dieters. These associations were not due to dieters being heavier to begin with.”<sup>30</sup>*

With three out of four women and half of all men rotating on and off of weight reduction plans throughout their lives,<sup>31</sup> we cannot be surprised if a growing number of ever younger, weight-worried children feel they should join their older peers and parents in this “solution.” Far too many thin, “normal,” and overweight children, teens and adults who are worried about not being the “right size” will continue to diet themselves into larger and larger sizes, contributing to inflated rates of obesity. This is not the outcome anyone wants, and yet warnings about this risk factor are consistently missing from “obesity prevention” initiatives.

### What is needed?

- Campaigns to promote positive eating and physical activity should educate the public about the dangers of dieting and explicitly discourage it.

- Policies should be implemented requiring warning labels on diet advertisements and diet products.
- Experts who are experienced in educating the public about why dieting is counterproductive and the importance of normal, balanced eating, and eating competency should be called upon to help with this change.

**3. When “size” is promoted as the goal or reason for healthy eating and fitness habits, the value of health as a goal or reason for these choices is diminished.**

Eating well and being physically active on a regular basis requires an investment of time, energy, and money. While hard data is needed, clinicians have long known that when a *size* is offered as the reward for this effort, if the results are too slow in coming or not dramatic enough, people give up. With today’s size-focused mentality, many who do all the right things but remain chubby or obese fall victim to these representative attitudes.

- *“Why should I eat healthy if it won’t make me thin?”* (14 year old girl)
- *“I exercised five days a week for three months and I didn’t lose any weight. What’s the point?”* (37 year old mother of 2 daughters and self-diagnosed “couch potato”)
- *“I try to eat balanced meals and be active everyday, but as soon as I think about how much weight I have to lose, all I want to do is eat—and it’s not a balanced meal I’m thinking of! I’ll always be fat anyway, so why bother?”* (34 year old obese woman who has been “on a diet” or felt she “should be on a diet” for over 20 years.)

When size is viewed as the “prize,” for positive health habits, many people feel as this 52 year old man, who, despite significant improvement in several health markers after a year of balanced eating and routine exercise, was still obese.

- *“I did all this, and all I get is health?!”*

Likewise, initiatives promoting “obesity prevention” as the reason for wholesome eating and fitness lead to this type of attitude, common in today’s youth:

- *“I eat junk food all the time and never exercise. What difference does it make? I’m not fat.”* (15 year old boy.)

These attitudes and the behaviors they lead to are not what anyone wants for the next generation of children. Framing size as the goal, encourages rather than diminishes complacency about health-enhancing choices, and plays a significant role in higher rates of obesity among children and adults.

### What is needed?

- To counter complacency about health habits campaigns should explicitly shift the focus to *health as a value vs. size as a goal*.
- In moving the weight paradigm from dread and failure to balance and health, campaigns should call upon those who have expertise in promoting this new paradigm and who are fluent in the language needed to deliver it.

## Call to action—Health as a value vs. size as a goal

It can no longer be ignored that the premise of “obesity prevention” compounds an already epidemic focus on and fear of weight gain *without really considering what is known about fear as a motivator in regard to eating and fitness*. In recent decades since weight was framed as “a problem” with “weight control” cast as the solution, eating disorders emerged to threaten those who are vulnerable and rates of obesity and associated health risks have risen exponentially. While other environmental changes have played a part, we cannot discount the fact that the thinner we have tried to be, the fatter we have become. Clearly *worry about weight* is not effective on the road to health.

Now is the time for health and campaign leaders to step back and look carefully at failed approaches to weight and “obesity prevention.” The full body of relevant evidence about weight stigma, the potent and detrimental role of body dissatisfaction, the counterproductive nature of weight-reduction diets, and the relationship between size as a goal and complacency about health must be taken into account. This data provides strong evidence that campaigns framed as “obesity prevention” are iatrogenic.

An opinion I recently wrote in the British Medical Journal presents an alternative:

*“...shifting the focus to how we live rather than what we weigh is an effective solution that empowers all people of every size and shape to be the best they can be. Who could argue that a fit and well-fed populous of diverse sized people would not be preferable to the status quo? Campaigns to support the development of healthy, realistic body images, wholesome, stable eating, and lifetime fitness habits regardless of shape, size, or weight could eliminate much of our population’s weight problem.”*<sup>32</sup>

## In place of “obesity prevention” a new-paradigm approach promoting health as a value vs. size as a goal should be incorporated.

One example of such a model is included on pages 8-10 of this paper. The evidence-based *Model for Healthy Body Image and Weight* and the child-friendly *Body Image Building Blocks* form the basis of the *Healthy Body Image: Teaching Kids to Eat and Love Their Bodies Too!* curriculum.<sup>33</sup> Additional examples of evidence-based initiatives using a *health vs. size* focus have been developed in the United States, Canada, and Australia, and should be reviewed as well.<sup>34-40</sup>

Changing the weight paradigm to promote *health vs. size* is a challenging shift for everyone who has been indoctrinated to view weight as “a problem” and “weight control” as the solution. The recent, rapid increase in rates of obesity makes it seem counterintuitive to reframe this goal. But like escaping from quicksand, we sometimes must do what feels contrary. Before going forward, developers and advisors of “obesity prevention” campaigns must seek more input from the growing number of clinicians and academics who have documented serious problems with weight-focused approaches, and who are experienced and fluent in educating others about a better way to promote healthy weights.

## About the author



**Kathy Kater, LICSW** is a St. Paul, MN psychotherapist and an internationally known and respected author, speaker, and consultant who has specialized in treatment and prevention of the full spectrum of body image, eating, fitness and weight-related problems for more than 30 years. Frustrated that progress in understanding these problems had not been matched by effective prevention, Kater authored *Healthy Body Image: Teaching Kids to Eat and Love Their Bodies Too!*, published by the National Eating Disorders Association in 1998. Fully updated in 2005 to more fully incorporate concerns about rising rates of obesity, this primary prevention curriculum was among the first of its kind to demonstrate significant measurable improvement in weight-related attitudes and reduced risk factors for disordered eating in pubescent children. *Healthy Body Image* is recommended by the U.S.D.H. Office of Women's Health in their *BodyWise* information packet for educators. Kater's second book, *Real Kids Come in All Sizes; Ten Essential Lessons to Build Your Child's Body Esteem* (Broadway Books/Random House, 2004; *Spanish Edition*, 2006) was written as a companion guide for parents.

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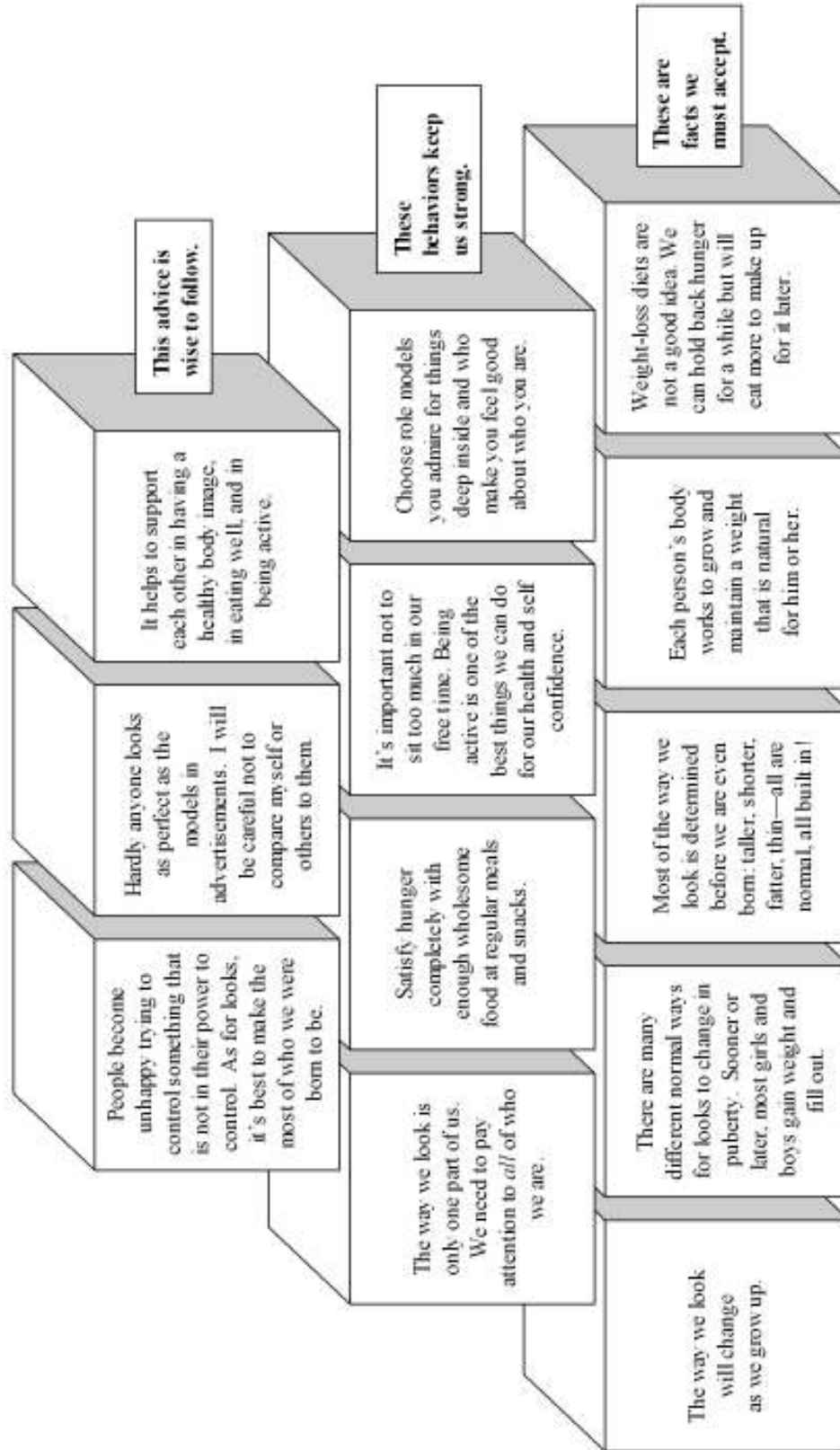
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## Promoting Health as a Value vs. Size as a Goal ©

The *Model for Healthy Body Image, Eating, Fitness and Weight* shifts the paradigm for weight to promote *health as a value vs. size as a goal*. In implementing the model, all of the conceptual building blocks should be addressed to avoid a skewed outcome.

<b>THE MODEL FOR HEALTHY BODY IMAGE, EATING, FITNESS AND WEIGHT</b>			
<b>Conceptual Building Blocks</b>	<b>Foundation</b>	<b>Desired Outcome</b>	<b>Goal</b>
<p>Developmental change is inevitable. Normal changes may include weight gain and temporary out-of-proportion growth. Fat does not, by itself, define "overweight."</p> <p>Genetics and other internal weight regulators strictly limit the degree to which shape, weight &amp; Body Mass Index can be manipulated through healthy means.</p> <p>Restricted or restrained hunger (dieting) results in predictable consequences that are <i>counterproductive</i> to sustained weight loss and interfere with normal hunger regulation.</p>	<p>Recognize and respect basic biology/physiology; understand what <i>cannot</i> be controlled about size, shape and hunger through healthy means.</p>	<p>Accept the limits to external control of body size and shape: "This is the body I was born to have."</p>	<b>Healthy Body Image</b>
<p>Balance attention to many aspects of identity. Looks are only one part.</p> <p>Satisfy hunger completely with enough varied, wholesome food in a stable, predictable manner on a regular basis.</p> <p>Limit sedentary choices to promote a physically active lifestyle through all stages of life.</p> <p>Choose role models that reflect a realistic standard and enhance self esteem.</p>	<p>Emphasize the real choices available to positively influence health.</p>	<p>Enjoy eating well for balance, energy, enjoyment, and hunger satisfaction.</p> <p>Create a physically active lifestyle for fitness, endurance, fun, relaxation and stress relief.</p>	<b>Healthy Eating and Physical Fitness</b>
<p>Promote historical perspective on today's cultural attitudes related to body image, eating, fitness, and health.</p> <p>Develop media literacy. Learn to think critically about messages that negatively influence body image and encourage weight bias.</p> <p>Support others in resisting unhealthy norms about body image, weight, dieting, low nutrient food choices, excessive eating for entertainment, and sedentary entertainment.</p>	<p>Develop social and cultural resiliency.</p>	<p>Develop autonomy, self esteem, confidence, and the ability for critical thinking.</p>	<b>Well Fed, Fit People With Healthy Diverse Weights</b>
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# The Body Image Building Blocks



## Ten Essential Lessons for a Healthy Body Esteem and Weight ©

### To begin, accept what *is not* in your power to control:

- 1) Accept your body's genetic predisposition. All bodies are wired to be fatter, thinner, or in between. This includes fatter in some places and thinner in others. Regardless of efforts to change it, over time your body will fight to maintain or resume the shape it was born to be. You may force your body into sizes and shapes that you prefer, but you can't beat Mother Nature without a tremendous cost.
- 2) Understand that all bodies change developmentally in ways that are simply not in your control through healthy means. You may positively influence changes of puberty, pregnancy and lactation, menopause, and aging by making healthy lifestyle choices, but you will not "control" these changes, no matter how much you try.
- 3) Never "diet." Hunger is an internally regulated drive and demands to be satisfied. If you limit the food needed to satiate hunger, it will backfire, triggering preoccupation with food and ultimately an overeating or compulsive eating response. You may lose weight in the short run, but over 85% of weight that is lost through dieting is regained, often with added pounds. Dieters who go off their diets only to binge are not "weak willed." They are mammals whose built-in starvation response has kicked in—both physically and psychologically—going after what has been restricted. Scientific evidence documented this in 1950, but most people are not aware of the biologically predictable, counterproductive results of "dieting."

### Then focus your attention and energy on what *is* in your power to control:

- 4) Satisfy hunger completely with a balance of wholesome, nutrient rich foods on a regular basis - *eat well!* In today's world, surrounded by flavor enhanced, cheap, cleverly advertised, readily available, low-nutrient entertainment foods, learning to *feed* your body versus merely "eat" is an essential difference. Enjoy entertainment food *after* nutritional needs are met.
- 5) Limit sedentary entertainment. Move (aerobically if possible) on a regular basis. Everyone who is not medically inhibited, regardless of size, can and should develop a reasonable level of fitness and maintain it throughout the life cycle. Enjoy sedentary entertainment *after* fitness needs are met.
- 6) Understand that if you eat well and maintain an active lifestyle, your healthy weight will be revealed over time. Value health versus size, and support this value with a health enhancing lifestyle. Don't be swayed by whether or not this makes you thin. Healthy, well fed, active bodies are diverse in size and shape, from fat to thin and everything in between. Don't let anyone tell you otherwise, not even your doctor, who may be caught in unhealthy cultural myths about weight.
- 7) Choose role models that reflect a realistic standard against which you can feel good about yourself. If the "Ugly Duckling" had continued to compare herself to the ducks she'd *still* be miserable, no matter how beautifully she developed.
- 8) Maintain your integrity as a human being. In spite of advertisements seducing you to believe that "image is everything," *Never* forget that how you look is only one part of who you are. Develop a sense of identity based on all the many things you can do, the values you believe in, and the person that you are deep inside.
- 9) Become media savvy. Educate yourself about the hidden power of advertisements. Advertisers spend tons of money on strategies to make you feel there is something wrong with you. Why? If their standard of beauty leaves you feeling deficient by comparison, their product's promise to improve your condition is an easy sale. Don't be "sold" this bill of goods.
- 10) Encourage your friends, family and co-workers to join you in developing a healthy, realistic body image. Use the collective energy your group would have spent on hating your bodies to make the world a better place. Help the next generation to develop healthy body image attitudes and learn positive lifestyle habits too.

## References

1. Jones, D. (2004). Body image among adolescent girls and boys: A longitudinal study. *Dev Psychol*; 40: 823-834.
2. Paxton, S. (2000). Individual risk factors and socio-cultural contexts for disordered eating. In: Gaskill D, Sanders, F, editors. *The Encultured Body: Policy Implications for Healthy Body Image and Disordered Eating Behaviors*. Brisbane: Publications and printing unit, Queensland University of Technology,; pp. 24–33.
3. Blowers, L., Loxton, N., Grady-Flesser, M et al. (2003). The relationship between sociocultural pressures to be thin and body dissatisfaction in preadolescent girls. *Eat Behav*; 4: 229-244.
4. Andersen, A. Cohn, L. & Holbrook, T. (2000). *Making Weight: Men's Conflicts with Food, Weight, Shape & Appearance*. Gürze Books: Carlsbad, CA., pp. 55.
5. Levine, M., Smolak, L. Body image development in adolescence. In: Cash, T, Prozinsky T., editors. *Body Image: Handbook of Theory, Research and Clinical Practice*. New York: The Guilford Press, pp. 74-82.
6. Maloney, M.J., McGuire, J., Daniels, S., & Specker, B. (1989) Dieting behavior and eating attitudes in children. *Pediatrics* 84 pp 482-487.
7. Gustafson-Larson, A., & Terry, R.D. (1992). Weight-related behaviors and concerns of fourth grade children. *J of the Amer Diet Assoc*. 92 (7), pp 818-822.
8. Jacobi C., Hayward C., de Zwan M., et al. (2004). Coming to terms with risk factors for eating disorders: Application of risk terminology and suggestions for a general taxonomy. *Psychol Bulletin*, 130:19:65.
9. Stice, E. (2002). Risk and maintenance factors for eating pathology: a meta-analytic review. *Psychol Bull*, 128: 825-848.
10. Daniels S.R., Arnett D.K., Eckel R.H., et al. (2005). Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment. *Circulation*, 111:1999–2012.
11. Ogden C.L., Carroll M.D., Flegal K.M. (2008). High body mass index for age among US children and adolescents. 2003–2006. *J Am Med Association*, 299:2401–5.
12. Neumark-Sztainer D., Paxton, S., Hannon, P.J. et al (2006). Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males; *J Adolesc Health*, 39, 244–251.
13. Neumark-Sztainer D., Wall, M., Guo J., et al. (2006). Obesity, disordered eating, and eating disorders in a longitudinal study of adolescents: How do dieters fare five years later? *J Am Diet Assoc*, 106, 559-68.
14. Ackard, D.M., Neumark-Sztainer, D., Story, M. et al. (2003). Overeating among adolescents: Prevalence and associations with weight-related characteristics and psychological health. *Pediatrics*, 111:67-74.
15. van den Berg, O., Neumark-Sztainer, D., (2007). Fat ‘n happy 5 years later: Is it bad for overweight girls to like their bodies? *J. Adolesc. Health*, 41, 415-417.
16. National Institute of Health, (2000). *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults; The Evidence Report*; Bethesda, MD: NIH Publication Number 00-4084.
17. O’Rahilly, S. (2006). Genetics of Obesity in Humans, *Endocrine Reviews*, 27 (7): 710-718.
18. Friedman , J.M. (2004). Modern science versus the stigma of obesity; *Nature Medicine* 10, 563 - 569.
19. Gaesser, G., Blair, S.(2002). *Big Fat Lies: The Truth About Your Weight And Your Health*. Gurze Books, Carlsbad, CA
20. Stefan N., et al. (2008). Identification and characterization of metabolically benign obesity in humans. *Arch Intern Med*. 168(15):1609-1616.
21. Wildman, R, et al. (2008).The obese without cardiometabolic risk factor clustering and the normal weight with cardiometabolic risk factor clustering. *Arch Intern Med*, 168(15):1617-1624.

22. Puhl, R.M., Heuer, C. (2009). The stigma of obesity: A review and update. *Obesity* 17, 941-964.
23. Mann T, Tomiyama A.J., Westling E., Lew A.M., Samuels B., Chatman J. (2007). Medicare's search for effective obesity treatments: diets are not the answer. *American Psychologist*, 62:220 – 233.
24. Stice, E., Presnell K., Shaw H, et al. (2005). Psychological and behavioral risk factors for obesity onset in adolescent girls: A prospective study. *J Consult Clin Psychol*, 73 (2), 195-202.
25. Stice E., Cameron R.P., Killen J.D., et al. (1999). Naturalistic weight-reduction efforts prospectively predict growth in relative weight and onset of obesity among female adolescents. *J Consult Clin Psychol*; 67:967-974.
26. Field, E.E., Austin, S.B., Taylor, C.B, et al. (2003). Relation between dieting and weight change among preadolescents and adolescents. *Pediatrics*, 112:900-906.
27. Daege, A., Rd, Robinson, P., Lawson, M., et al. (2002). Psychologic and physiologic effects of dieting in adolescents. *South Med J*, 95(9): 1032-41.
28. Patton, G.C., Selzer, R., Coffey, C., et al. (1999). Onset of adolescent eating disorders: Population based cohort study over 3 years. *B Med J*, 318: 765-8.
29. Neumark-Sztainer D. (2009). Preventing obesity and eating disorders in adolescents: What can health care providers do? *J Adolesc Health*, 44 206-213.
30. Neumark-Sztainer D., Wall M., Story M., van den Berg P. (2008). Accurate parental classification of overweight adolescents' weight status: does it matter? *Pediatrics*; 121(6), 1495-1502.
31. University of North Carolina at Chapel Hill (2008, April 23). Three out of four american women have disordered eating, survey suggests. *ScienceDaily*. Retrieved March 2, 2010, from <http://www.sciencedaily.com/releases/2008/04/080422202514.htm>
32. Kater, K. (2008). Debate about fatness increases health risks. *bmj.com*, 24 Feb.
33. Kater, K., (2005). *Healthy Body Image: Teaching Kids to Eat and Love Their Bodies Too!* National Eating Disorders Association, Seattle, WA.
34. Neumark-Sztainer D. (2009). The interface between the eating disorders and obesity fields: Moving toward a model of shared knowledge and collaboration. *Eating Weight Disord*, 14:51-58.
35. Neumark-Sztainer D. Flattum CF, Story M, et al. (2009). Dietary approaches to healthy weight management for adolescents: The new moves model. *Adolescent Medicine*; 19: 421-30.
36. Bacon L, Stern JS, Van Loan MD, Keim NL. (2005). Size acceptance and intuitive eating improve health for obese, female chronic dieters. *J Amer Diet Assoc*, 105: 929-936.
37. Danielsdottir, S, Burgard, D, Oliver-Pyatt, W. (2009). *AED Guidelines for Childhood Obesity Prevention Programs*, retrieved on March 1, 2010 from [www.academyforeatingdisorders.org/media/Guidelines.cfm](http://www.academyforeatingdisorders.org/media/Guidelines.cfm).
38. O'Dea, J. (2007). *Everybody's Different*. Australian Council for Educational Research Press. Camberwell VIC.
39. Toronto Hospital for Sick Kids; McVey, G.; *The Student Body: Promoting Health at Any Size* (on-line resource). Retrieved on March 1, 2010 from <http://research.aboutkidshealth.ca/thestudentbody/home.asp>.