

# KIDS, EATING, WEIGHT & HEALTH

Helping Without Harming

By Jon Robison, PhD, MS



# CHILDHOOD EATING

**I**T WOULD BE DIFFICULT TO OVERSTATE THE URGENCY THAT U.S. GOVERNMENT AND HEALTH OFFICIALS HAVE PLACED ON THE DANGERS POSED BY OBESITY. In 2003 U.S. Surgeon General Richard Carmona warned that obesity was “a greater threat than weapons of mass destruction” from which nothing short of a “cultural transformation” could save us.<sup>1</sup> No sector of the population is safe from the almost obsessive focus on reducing weight. Government agencies are demanding that their workers go on diets and wear pedometers. Hospital systems all over the country are scrambling to cash in on the skyrocketing demand for organ-mutilating surgeries. Unfortunately, workplaces and ever growing numbers of individuals continue to waste valuable time, energy and resources on weight loss initiatives that show no evidence of efficacy.<sup>2-4</sup>

Even our children are not safe. In a recent article in the prestigious *New England Journal of Medicine*, a group of researchers menacingly warned that “the tsunami of childhood obesity has not yet hit shore” and that it was only a matter of time before heart attack and kidney failure became “a relatively common condition of young adulthood.”<sup>5</sup> They went on to suggest that the millennia-long trend of increasing human life expectancy would soon be reversed by the growing worldwide increase in body mass.

It is bad enough that larger children are regularly singled out and teased by other children and sometimes even by teachers. Now we are asking schools to weigh children and send notes home to parents when these children are deemed to have a “weight problem.” Both children and adolescents are faced with constant haranguing about the dangers of fat at the same time they are subjected to an overload of media images of often seriously underweight celebrity role models. Growing efforts to promote “healthy eating” at school have led to organized searches through children’s lunch boxes, prohibition of cupcakes from birthday parties and confiscation of other “contraband” foods.

Taken together these types of measures threaten to do irreparable damage to both the physiological and psychological health of our children. They are already exacting a heavy toll in terms of self-esteem, eating habits and body image. The purpose of this issue of *Absolute Advantage* is to 1) critically examine the premises on which the “childhood obesity crisis” is built, 2) document the lack of efficacy and dangers of current approaches and 3) present alternative approaches for parents, teachers and communities that will help our children without harming them.

# WEIGHT HEALTH

## How Is “Childhood Obesity” Measured?

There is, in actuality, currently no widely accepted definition for “childhood obesity”. The U.S. Centers for Disease Control recommend using the Body Mass Index, (weight in kilograms divided by height in meters squared) to determine “overweight” in children. Current guidelines propose that children be considered overweight if they fall at or above the 95<sup>th</sup> percentile and “at risk” of becoming overweight if they fall between the 85<sup>th</sup> and 95<sup>th</sup> percentiles.<sup>6</sup> Recently, the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity of the American Medical Association recommended amending this classification so that children (from 2-18 years old) at or above the 95<sup>th</sup> percentile would be labeled “obese” and those between the 85<sup>th</sup> and 95<sup>th</sup> percentile would be labeled “overweight.”<sup>7</sup>

The use of BMI to measure weight and related health status in adults has become widespread largely due to the difficulty of accurately measuring body fat in non-clinical environments. Unfortunately there are significant problems with its use. The BMI is actually not a good predictor of total body fat in individuals.<sup>8</sup> Furthermore; it does not take into consideration any discrepancies in terms of gender, race, age or ethnicity. The BMI also doesn’t distinguish between fat and muscle tissue, resulting in dramatically inaccurate conclusions about who is and is not “overweight” and “obese” (*table 1 below*).

The evidence against the validity of the BMI as a health indicator is perhaps most damaging with respect to cardiovascular disease, where the impact of weight on health has traditionally been considered to be the strongest. A recent, large meta-analysis of the literature in the British Medical Journal,

Lancet, found the BMI to be a very poor predictor of cardiovascular disease or total mortality.<sup>9</sup> As one cardiovascular researcher concluded in an accompanying editorial; “BMI can definitely be left aside as a clinical and epidemiological measure of cardiovascular risk for both primary and secondary prevention.”<sup>10</sup>

Research indicates that the relationship between body fat and BMI in children is even more tenuous than it is for adults.<sup>11,12</sup> In an article in the Journal Of Pediatrics that evaluated this relationship, the authors concluded that “the available data do not show that BMI adequately reflects body fat mass in children and adolescents.”<sup>13</sup> Additionally, children of different ethnic origins such as Mexican and Navajo tend to have shorter, denser body builds, which causes them to weigh more and plot higher on the BMI curves even though body fat is not elevated.<sup>14,15</sup>

To make matters worse, the most commonly used growth charts published in 2000 are based on a previous, slimmer population of children.<sup>16</sup> While children have been growing taller and heavier and maturing earlier for over a century, the growth charts do not reflect these changes. Therefore, instead of 5% of children plotting at or above the 95<sup>th</sup> percentile (cutoff for overweight) 15% of children currently do. This tells us that the population as a whole is getting larger, but it tells us nothing of importance about the health of individual children.<sup>17</sup>

TABLE 1

BMI Does Not Distinguish Between Fat & Muscle		
NAME	BMI	WEIGHT STATUS
George W. Bush	26.3	Overweight
Will Smith	27	Overweight
Yao Ming	27.7	Overweight
George Clooney	29	Overweight
Johnny Depp	29.8	Overweight
Matt LeBlanc	30	Obese
Tom Cruise	31	Obese
Shaquille O’Neil	31.6	Obese
Arnold Schwarzenegger	33	Obese



## What Is Normal Growth And Development For Children?

Children's weights, like many human biological measurements, are distributed according to a symmetrical bell-shaped curve (normal distribution). For any age and gender most children will weigh an average amount, with fewer children weighing considerably higher or lower than the average. Growth percentiles simply represent the cumulative percentages on the bell-shaped curve. This means, for instance, that the weights of 15% of children plot at the 15<sup>th</sup> percentile or below and the weights of 95% of children plot at the 95<sup>th</sup> percentile or below. The important point is that, even though some groups of children may be by definition unusual in the sense that they are growing above or below the average, their growth may be at the same time quite normal.

Therefore, the designation of the 95<sup>th</sup> percentile as a cutoff point for determining whether a child is "overweight" is a relatively arbitrary one. Determining for children what is normal or abnormal growth should not be dependant on the percentile at which they are growing, but on the integrity or consistency of their growth over time. A thorough and illuminating exploration of what does and does not constitute normal, healthy growth for children can be found in child feeding expert Ellyn Satter's new book—*Your Child's Weight: Helping Without Harming*.<sup>17</sup> Unfortunately, with all of the attention surrounding the "childhood obesity epidemic", almost everyone has jumped on the bandwagon of assuming that large children are abnormal and in need of treatment. Yet, as Satter so eloquently explains:

*"Despite all the exposure, the messages are still wrong. In truth, a child growing at the upper percentile is highly likely to be just fine. What is critical is how consistent his growth has been over time. At all times, a child's growth must be interpreted in the context of that child's own history. It cannot be interpreted on the basis of an arbitrary cutoff."*<sup>17</sup>

## Do Fat Children Become Fat Adults?

The concern about high BMIs in children is based on the traditional "wisdom" that children who track at or above the 95<sup>th</sup> percentile will inevitably end up as fat adults.

This, however, is not consistently supported by the available scientific evidence. In fact, according to a review of 17 studies that followed groups of children for decades the general tendency is actually towards slimming. The authors found that 75% of infants and toddlers, 60-70% of preschoolers and 50-60% of school-age children actually slim down by the time they reach adulthood. Furthermore, only 5-20% of obese adults were obese as children.<sup>18</sup>

A study following more than one thousand British families concluded similarly that there was "little tracking from childhood overweight to adulthood obesity and that "being thin in childhood offered no protection against adult fatness."<sup>19</sup> Only 21% of 3,000 obese adults questioned in 1946 had been obese at age 11, and 79% of obese 36-year-olds first became obese as adults.<sup>20</sup>

In 2005, scientists from Kaiser Permanente and the Oregon Health and Science University in Portland conducted a comprehensive review of the evidence entitled *Screening and Interventions for Childhood Overweight for the US Preventive Services Task Force*. They concluded that "a substantial proportion of children under age 12 or 13, even with BMIs of >95<sup>th</sup> percentile will not develop adult obesity."<sup>21</sup> Doctor David Klurfeld, Chairman of the



Department on Nutrition and Food Science at Wayne State University and Editor in Chief of the American Journal of Clinical Nutrition summed up the reality of this seeming paradox: “It is intuitive that fat children will grow up to be fat adults, but the facts don’t always support intuition.”<sup>22</sup>

## Do Fat Children Grow To Be Unhealthy Adults?

The focus on controlling children’s weight is based on the premise that without intervention they will grow up fat, resulting in increased risk for premature mortality and morbidity. However, most epidemiological studies do not show a strong correlation between weight and mortality except at the extremes of the bell-shaped curve.<sup>23</sup> In fact, as the weight of the population has steadily increased over the past 50 years, mortality from so-called obesity-related diseases, such as heart disease and cancer has consistently declined. Furthermore, Blair et. al, have shown that, when fitness is taken into consideration, fatness has little bearing on mortality for either men or women.<sup>24</sup> Finally, the most recent research shows that the impact of overweight and obesity on mortality has been greatly exaggerated, with most fat people having little or no extra risk over their thinner counterparts.<sup>25</sup>

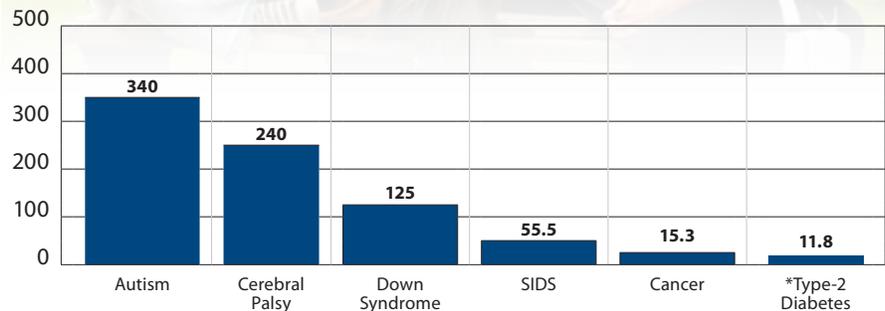
In spite of recent predictions of impending doom due to the increased weight of the population it is informative that for

more than a century, increasing body weight has been strongly associated with increased life expectancy.<sup>25</sup> Like so many of the other emotionally explosive claims surrounding obesity, the claims that our children will be the first generation not to live as long as their parents were recently exposed as scientifically inaccurate, with the authors admitting that their estimates were “just back-of-the-envelope, plausible scenarios” and that they “never meant for them to be portrayed as precise.”<sup>26</sup>

When it comes to fat children and adult morbidity, the relationship appears to be just as tenuous. In the study of a thousand British families the authors concluded that there was “no excess adult health risk from childhood or teenage overweight.”<sup>19</sup> Furthermore, in the review of 17 studies that examined the tracking of obesity from childhood to adulthood mentioned above, children whose fatness persisted into adulthood had no more disease risk than adults who had never been fat. In fact, fat adult women who were also fat as children actually had lower triglycerides and total cholesterol.<sup>18</sup>

Though it is often taken for granted that fat children means unhealthy children, the extensive review of screening and interventions for childhood overweight in the journal Pediatrics in 2005 “did not locate adequate longitudinal data relating childhood weight status to childhood weight outcomes.”<sup>21</sup> The much heralded national “epidemic” of childhood diabetes has also failed to materialize. Although type II diabetes may be increasing in certain ethnic groups, according to the U.S. Centers for Disease Control, the disease is “still rare in childhood”<sup>27</sup> with the incidence remaining much lower than other childhood afflictions that seem to garner significantly less media coverage. (see table below—ref #28-33)

The assumption that as children are getting fatter they are becoming unhealthier is also not supported by the latest research from England that concluded there was “no rise in the number of children suffering from longstanding illnesses, which include type II diabetes.”<sup>34</sup>



\*For children 11-14 years old. Virtually non-existent in younger children.



## The Real Scope of The Problem

There is little disagreement that the United States population, including both adults and children has gotten heavier since the 1950s. Though the problem for our children has been framed by the government and the health establishment as one of gargantuan proportions, the actual picture is considerably less frightening. Even with the significant increases over the past fifty years, only about 15% of children between 6 and 19 years old and 10% of children between 2 to 5 years old are considered “overweight”, according to the questionable cutoff points that have been described.<sup>35</sup> This means that 85% and 95% respectively in these age groups are NOT “overweight.” Further more, the latest research looking at weight changes between 2,000 and 2,002 failed to find any increase in the weight of children over that period of time.<sup>36</sup>

Interestingly, the accuracy of similarly fearful pronouncements concerning childhood obesity from Great Britain has also recently been called into question. In analyzing data from the Health Survey for England 2003, researchers from the Social Issues Research Center concluded that:

***“There have been no significant changes in the average weights of children over nearly a decade. This can be taken as evidence that there has been no***

***‘epidemic’ of weight gain, since an epidemic would certainly have affected average weights.”<sup>34</sup>***

They decry as inappropriate “sensationalist claims and the quite unjustified use of terms such as ‘epidemic or ‘exponential rise’” to describe the current situation and conclude with a stern warning that would seem to apply equally well in our country.

***“We do no service to the people at risk of obesity-related morbidities in our society by ‘hyping’ their plight, exaggerating their numbers or diverting limited educational, medical and financial resources away from where the problems really lie.”<sup>34</sup>***

## Have Our Children Gotten Fatter from Eating Too Much of The Wrong Food?

Childhood obesity has been portrayed as fundamentally an energy imbalance problem based on increased calories in and decreased calories out. Therefore our children are getting fat because they eat too much of the wrong foods and move too little. Once again, in spite of the widespread acceptance

and intuitive appeal of this claim, the research does not conclusively support an increase in caloric intake among children.<sup>37,38</sup> In fact, in the 30 plus years between 1965 and 1996, national data show a decrease of 17% in total energy intake in children and adolescents as well as a general downward trend in the percentage of calories from fat.<sup>39</sup> In a recent extensive review of the literature, Rolland-Cachera and Bellisle conclude that children are now:

***“Taller and heavier than in the past, in spite of relatively stable or falling energy intakes...It is often suggested that high energy or high fat intakes predispose to obesity. No clear evidence for this emerges from epidemiological studies conducted in children.”<sup>40</sup>***

With the resurrection of the low-carbohydrate craze in recent years in the United States many anti-obesity, childhood nutrition initiatives have focused on trying to reduce and/or eliminate various sources of sugar from children’s diets. Soft drinks and foods with added sugars (sweets) have been particularly singled out as contributing significantly to the obesity problem. This has led numerous school



systems to restrict or ban soda on their grounds.<sup>41-43</sup> Other schools have prohibited the consumption of sweets during birthday parties, and still others have actually searched children's lunches and confiscated foods considered to be "unhealthy."<sup>44-46</sup>

Unfortunately, the science supporting the role of sugary foods in the etiology of obesity is quite limited. Most studies do not show a positive relationship between sugar intake and obesity in children.<sup>47-50</sup> Research has also generally found little relationship between beverage consumption and BMI. A large study that followed some 12,000 children and adolescents from 1 to 19 years old failed to find an increase in the consumption of carbonated beverages from 1978 to 1998 in any age group.<sup>51</sup> Other

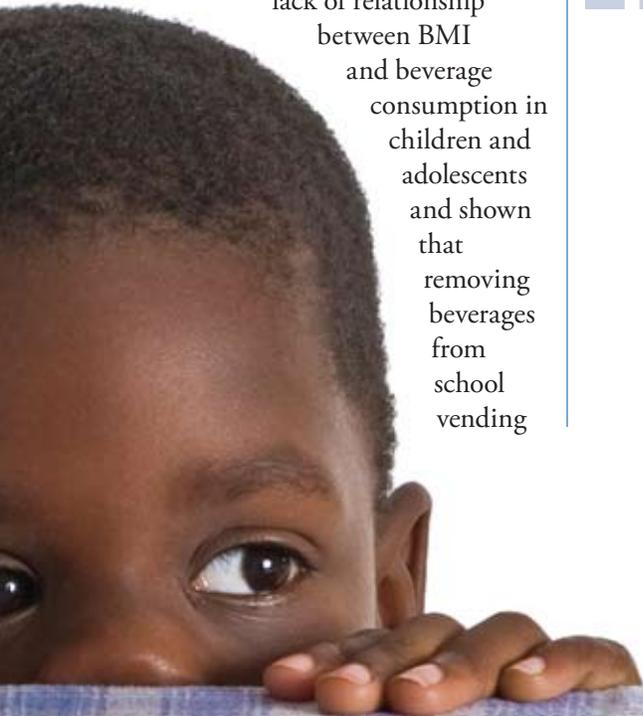
research has supported the lack of relationship between BMI and beverage consumption in children and adolescents and shown that removing beverages from school vending

machines has no impact on children's BMI's.<sup>50,52</sup> Paradoxically, in one recent study, there was actually an inverse relationship between weight and soda drinking; teenagers who drank the most soda were actually the skinniest.<sup>53</sup> Contrary to popular opinion, the research suggests that sweeteners have little affect on the nutrients children and teens receive or on the quality of their diet.<sup>54,55</sup>

Similarly, though much has been made of the supposed contribution of "fast" and "junk" food to obesity, the actual evidence for such an effect is anything but convincing. In a study conducted in Australia and published in the International Journal of Obesity in 2005,

researchers concluded that "fast food consumption was not associated with greater obesity," that "there was no relationship between availability of eating places and prevalence of obesity" and that "public health policy targeting takeaway food and eating out are likely to have little impact."<sup>56</sup> Interestingly, according to the World Health Organization, the countries in the world with the fattest children are Uzbekistan, Kiribati, Algeria and Egypt; all places where fast and junk foods are relatively rare. While what children eat certainly plays a role in their health, blaming child overweight and obesity on particular foods and food groups is simply not supported by the scientific evidence.<sup>57</sup>

“Contrary to popular opinion, the research suggests that sweeteners have little affect on the nutrients children and teens receive or on the quality of their diet.”





## Have Our Children Gotten Fatter From Moving Too Little?

The other side of the energy equation, “calories out,” has also been widely promoted as a major contributor to the childhood “obesity epidemic.” Much of the blame to date has been directed at the influence of technology; particularly television, computers and video games. The assumption is that because children are spending more time involved in these types of activities, they are spending less time being physically active, thereby gaining weight. As before, though this assumption seems to make intuitive sense, the research to back it up is equivocal. Most of the studies to date have looked at the relationship between television viewing, physical activity and weight. Though there are conflicting data, in general the findings suggest little relationship between the time children spend watching television and the amount of physical activity in which they engage.<sup>58-60</sup>

Writing in the journal *Pediatric Exercise Science* in 2002, Marshall et al conclude their review of the relevant literature by saying:

***“One hypothesis is that involvement in sedentary behavior limits the time available for participation in health-enhancing physical activity. Most data do not support this hypothesis and cross sectional and prospective data between TV viewing and adiposity show weak and inconsistent associations.”<sup>60</sup>***

In 2004, a meta-analysis of 52 previous studies re-examined the relationship

between television, physical activity and body fatness in children between the ages of 3 and 18. Published in the prestigious International Journal of Obesity, the research reaches the same conclusion saying:

***“A statistically significant relationship exists between TV viewing and body fatness among children, but it is likely to be too small to be of substantial clinical relevance.”*<sup>61</sup>**

In fact, even the relatively ubiquitous conclusion that children are watching increasing amounts of television has recently been challenged. In an article in the Journal of The Royal Society of Health in 2004, the authors conclude:

***“Although more children and youth have greater access to TVs than in previous generations, the amount of TV watched per head has not changed for 40 years... Indeed, measures of ‘couch potato-ism’, such as TV viewing, may be inappropriate markers of inactivity.”*<sup>62</sup>**

To summarize, in spite of ongoing proclamations about supposed decreases in children’s daily physical activity and energy expenditure promoting the “epidemic” of childhood obesity, there is little scientific support for a causal relationship. The state of the art in this regard is summed up in an article in the Proceedings of The Nutrition Society:

***“...No definite conclusions are justified about the levels of physical activity of children, or whether these are sufficient to maintain and promote health.”*<sup>63</sup>**

Interestingly, in Australia, where similar alarms over the “obesity

epidemic” have been repeatedly sounded, a recent, government-funded study of 5500 school children from all over the country found that the prevalence of moderate to vigorous physical activity had risen by 15-25% from 1985 to 2004, as had the percentage of children considered to be adequately fit. As far as the relationship between physical activity and weight, in the authors’ own words; “surprisingly, the survey did not show any clear correlation between BMI and the amount of physical activity.”<sup>64</sup>

## **Are Current Approaches Helping Our Children?**

In spite of the lack of scientific support that the “childhood obesity epidemic” is primarily the result of poor eating and sedentary lifestyle, anti-obesity initiatives have focused on getting fat children to decrease their energy intake and increase their energy expenditure with the ultimate goal of losing weight. As has been the almost undisputed case with their parents for decades, these efforts have been decidedly unsuccessful.

One of the largest school-based prevention programs to be studied was the Child Adolescent Trial for Cardiovascular Health (CATCH) sponsored by the National Institutes of Health. This highly-funded study involved thousands of elementary school children in more than 50 different schools in 4 states. In spite of a combination of food service modifications, enhanced physical education, increased health curriculum and additional family education, the three year Trial produced no changes in overweight, blood pressure or cholesterol levels.<sup>65</sup>

A review of the literature on the efficacy of such interventions conducted by Lorrene Ritchie and colleagues at the University of California, Berkeley, concluded that: “There is little evidence so far that school-based programs have had a major or lasting impact on BMI or body adiposity.”<sup>66</sup> Even when programs do manage to reduce caloric intake and/or increase caloric expenditure during school hours, research suggests that children compensate for the changes once they are out of school, and the initial improvements seem to diminish with time once the program has ended.<sup>67</sup>

This conclusion was supported by a recent study published in the International Journal of Obesity involving 1500 children of various ages and socioeconomic status in the United States. Researchers gathered information on the number of hours each student spent in physical activity classes during school hours. They then gave each student an accelerometer and had them keep track of the duration, time and intensity of their physical activity outside of school during the week. Despite a wide range of time spent in PE classes during school (1.8-9 hrs./week), the children engaged “in the same amount of daily activities regardless of their environment or exposure to school-based physical education.”<sup>68</sup>

Given the overwhelming failure of weight loss diets in adults over the past 50 years, the failure of similar approaches to reduce children’s weight is certainly not surprising. A recent systematic review of dietary interventions for weight reduction in childhood in the UK concluded that there was “little evidence to support the current recommendation of a low-fat energy-restricted diet.”<sup>69</sup>



The reality is that at best, the literature suggests only a weak association between children's dietary and exercise habits and their bodyweight.<sup>70</sup> In a testimony before a USDA subcommittee, nutrition expert Maureen Storey explained that even if parents and schools could perfectly control the calories, sugar, fat and television hours children received, it would be likely to have only a minimal impact on the naturally-occurring variations in BMI. In other words, there would still be a wide variety of weights among children—some would be naturally fatter, some naturally thinner.<sup>71</sup>

## Are Current Approaches Harming Our Children?

Traditional approaches to nutrition education focus on rules, restrictions and prohibitions to control what children eat. They are taught about the Food Guide Pyramid, portion size, and the do's and don'ts of appropriate food selection. Unfortunately, the literature demonstrates that these types of approaches are not only ineffective but actually counterproductive. Many studies over the last few decades show that when adults try to regulate or control what children eat, the children are more, not less, likely to end up with weight, body image and eating-related problems.<sup>72-74</sup>

In controlled experiments, trying to encourage, pressure, or even reward children to eat certain foods actually turns them off to those foods and makes it less likely that they will eat them. Conversely, if children are deprived of certain foods, they become more interested in those foods and are more likely to over eat

them when they get the opportunity.<sup>75</sup> Rather than reducing schoolchildren's interest in candy, for instance, recent attempts to eliminate these foods from school vending machines have resulted in the growth of "black market" candy operations in which students buy large quantities of candy outside of school and sell them covertly for a profit to fellow students in the hallways and bathrooms.<sup>76</sup> Furthermore, research supports that compared to children who are not so deprived, treat-deprived children actually end up being heavier.<sup>77</sup> According to child nutrition and eating expert Dr. Jennifer O'Dea:

***"Negative messages such as sugar and fat are "bad," and the use of the term "junk food" contribute to the underlying fear of food, dietary fat, and weight gain, which precedes body image concerns and eating problems."***<sup>78</sup>

The struggles between adults and children that often result from traditional, control-oriented approaches to feeding can have consequences far beyond their nutrition and weight implications. The feeding relationship is a major source through which children learn to feel loved, nurtured, listened to and safe in the world. Research shows that the parent-child feeding relationship can have a powerful impact on how children feel about themselves and how they interact with the people around them.<sup>79</sup> Treating this relationship as primarily an opportunity to control food intake and thus prevent childhood obesity is not only likely to fail but may end up being "counterproductive and damaging to the child's social, emotional and physical health."<sup>80</sup>

Perhaps the most damaging affects of childhood obesity prevention

programs result from the focus on weight as opposed to health. The vast majority of overweight children and adolescents know that they are fat and have already developed poor body image, low self esteem, and a fear of food.<sup>81-83</sup> They are also more likely to exhibit disordered eating, extreme dieting measures, greater levels of emotional distress and lower expectations of their educational future.<sup>84,85</sup> It is hard to imagine how sending them home with report cards saying they are too fat or singling them out for special exercise or nutrition interventions could possibly be beneficial. As child nutrition and eating expert Jennifer O'Dea concluded, "the last thing that obese children need is a reminder of their undesirable weight status."<sup>86</sup>

Unfortunately, similar negative consequences of the war on obesity are also being felt by normal weight children who incorrectly perceive themselves as being too fat.<sup>87</sup> Surveys show that many children and most young girls classify themselves as overweight, even though they are not.<sup>87,88</sup> In increasing numbers they are participating in unhealthy weight control measures that are unlikely to succeed and hold the potential for serious negative health consequences.<sup>82,88,89</sup> Not surprisingly, in a prospective nutrition study of over 14,000 children published in the journal *Pediatrics*, the author's concluded that "dieting to control weight is not only ineffective, it may actually promote weight gain."<sup>90</sup>

Even with the best of intentions, many if not most adults are themselves so anxious and confused about issues related to nutrition and weight that they may do more harm than good when it comes to children. In a recent study, teachers who were most likely to be involved



in a childhood obesity prevention program demonstrated a low level of knowledge related to nutrition and weight control and a very high level of body dissatisfaction and self-reported eating disorders. Furthermore, 85% of the teachers reported recommending strict, calorie-reduced diets to overweight children, many of whom who were in the middle of their adolescent growth spurt!<sup>91</sup>

The focus on weight rather than health in obesity prevention programs also can promote unwanted consequences with relation to physical activity. Research suggests that such additional attention on fat children can increase their sensitivity to their weight and their perceived lack of physical prowess, making them less likely to participate in physical education and sport.<sup>92</sup>

Clearly, the focus on weight as a means of improving our children's health is misguided. As is true for adults, children of all body shapes and sizes can improve their health and quality of life, but pressuring them to eat less and exercise more in order to lose weight does not work and can yield unwanted and unhealthy consequences.

“Research shows that the parent-child feeding relationship can have a powerful impact on how children feel about themselves and how they interact with the people around them.”



## Helping Without Harming: From Obesity Prevention To Health Promotion

If we are serious about helping without harming, we need to move from childhood obesity prevention to childhood health promotion. We can do this by replacing the focus on getting fat children to lose weight with a focus on self-acceptance, positive body image, healthy eating and pleasurable physical activity for all children.

The first step in this process is to help children to accept and value themselves and others regardless of their differences—including differences in body shape and size. Fat children (particularly young girls) have significantly lower levels of self-esteem, and significantly higher levels of sadness, loneliness, and nervousness. They are also more likely to engage in high risk behaviors like smoking or drinking alcohol.<sup>93</sup> Research suggests that children with positive self images are more likely to eat well and have healthier lifestyles regardless of their weight. Approaches that promote a positive self-image and a strong sense of self-worth in children are available and have been shown to improve body image and decrease eating disorders, obsession with attaining thinness, vulnerability to media messages, anxiety and depression in adolescents.<sup>94,95</sup>

In the second of the three articles in this issue, therapist Carmen Cool describes in detail the kind of school and community based intervention that we should be providing for our children as an alternative to sure-to-fail “obesity prevention” programs. The Boulder Youth Body Alliance provides a powerful, evidence-based model for teaching children to respect and honor

the natural existing diversity in body shapes and sizes as a first important step towards honoring and caring for the bodies they presently have.

Because approaches that attempt to restrict and control what children eat don’t work and often make things worse, the nutrition focus in all settings should be on helping children to listen to their innate, internal signals (intuitive or normal eating) to guide what and how much they eat. Parents, teachers and other adults can best help children develop truly healthy eating by themselves having a joyful, relaxed attitude about eating; and by giving children positive messages about food, helping them to explore variety, and trusting them to eat what is right for their bodies.<sup>96</sup>

Children who eat this way are less likely to respond to external and emotional cues for eating and therefore less likely to overeat as a result of advertising, super-sizing, or other outside pressures.<sup>17</sup> By “inoculating” our children in this way, we can help them to successfully and healthfully navigate the so called “obesigenic” environment in which we live, without squandering critically limited resources on tactics such as vilifying the food industry, moralizing about good and bad foods and curtailing freedom of speech. With respect to the latter tactic, it is significant to note that, in countries where marketing of “junk” foods has been limited or prohibited for many years, there has been no discernable effect on the weight of children or adolescents.<sup>97</sup>

In her insightful contribution to this issue of *Absolute Advantage* dietitian Elizabeth Jackson, faculty member of The Ellyn Satter Institute, describes how “prevention” actually becomes a meaningful possibility when the definition of the clinical

term “overweight,” changes from avoiding some arbitrary cutoff point to supporting each individual child’s normal growth and development. She shows us that by allowing children to reconnect with their internal cues of appetite, hunger and satiety we can help them to make peace with food and with their bodies.

Many adults and children of every size and shape could benefit from increased involvement in physical activity. As with healthy eating, the focus should be on helping children of all sizes to find ways of pursuing enjoyable, sustainable levels of physical activity. Involving children in enjoyable physical activities can boost their self-esteem, social interactions and friendships.<sup>98,99</sup> However, singling out or pressuring larger children to engage in sport and physical activity can increase stigmatization and reduce the likelihood of participation.<sup>99</sup> Because the focus on exercising for calorie burning and weight loss is ineffective and often counterproductive, physical activity should be promoted for the purpose of “moving the body, not changing the body.”<sup>100</sup>

## Health At Every Size

Approaches to helping children (and adults) to be healthier without focusing on weight are based on a philosophy/movement referred to as Health At Every Size (HAES).<sup>101</sup> The basic conceptual framework of this approach includes acceptance of:

1. *The natural diversity in body shape and size*
2. *The ineffectiveness and dangers of dieting*
3. *The importance of relaxed eating and pleasurable physical activity in response to internal body cues*



**4. The critical contribution of social, emotional and spiritual as well as physical factors to health and happiness.**

HAES promotes that an appropriate “healthy weight” for an individual cannot be determined by the numbers on a scale or by using the Body Mass Index or body fat percentages. Rather, HAES defines a “healthy weight” as the natural weight a person’s body adopts given healthy eating (based on internal cues) and reasonable levels of physical activity for that individual. Table 2 outlines the major components of the HAES philosophy.<sup>101</sup>

HAES offers an effective, compassionate, health-centered alternative to the failures of traditional approaches to weight and health. There is a significant body of literature that demonstrates that most so called weight-related problems can be treated effectively without weight loss.<sup>102-104</sup> Even with type II diabetes, blood glucose can be normalized without weight loss even when people remain markedly obese by traditional medical standards. Furthermore, recent research shows the HAES approach to be clearly superior to state of the art, behavioral, weight loss intervention for improving the long-term health of fat participants.<sup>105,106</sup>

**Into The Future**

There is little argument that populations throughout the world have experienced significant increases in weight. However, as we continue to wage our “War on Obesity” it is essential that we take steps to insure that we are protecting our children from becoming its casualties. “Obesity prevention” as it is currently envisioned is ineffective and iatrogenic. Although we must address the risks to our children posed by unhealthy lifestyles, we must also make sure that our children benefit rather than suffer from our interventions. We can do this by following the Health At Every Size approach, ensuring that all our interventions are “health-centered” rather than “weight-centered.” Although this may seem a radical departure from tradition, it is consistent with the clearly worded but largely ignored conclusion of the United States National Institutes of Health Consensus Panel on Obesity which suggested as far back as 1992 that:

**“A focus on approaches that produce health benefits independently of weight loss may be the best way to improve the physical and psychological healthy of Americans seeking to lose weight.”<sup>107</sup>**

Current approaches based on “preventing” childhood overweight and obesity are fundamentally flawed in that they deny the naturally existing, normal distribution of body weight. Rather than attempting to “prevent” childhood “overweight” based on arbitrary cutoff points and interventions with no evidence of efficacy, we can help our children to embrace diversity, feel better about their bodies and make peace with their weight and their food. This holistic approach can help all our children to lead happier and healthier lives by loving and caring for the bodies that they have—right now! ★

▶ To view the source references for this article, please turn to the section, *Kids, Eating, Weight & Health References* on page 30-31.

Table 2

<b>HEALTH AT EVERY SIZE: THE MAJOR COMPONENTS</b>	
<b>Self-Acceptance</b>	
Affirmation and reinforcement of human beauty and worth irrespective of differences in weight, physical size and shape.	
<b>Physical Activity</b>	
Support for increasing social, pleasure-based movement for enjoyment and enhanced quality of life.	
<b>Normalized Eating</b>	
Support for discarding externally imposed rules and regimens for eating and attaining a more peaceful relationship with food by relearning to eat in response to physiological hunger and fullness cues.	

**Jonathan Robison, PHD, MS**



Dr. Jonathan Robison holds a doctorate in health education/exercise physiology and a master of science in human nutrition from Michigan State University where he is assistant professor. Dr. Robison presents frequently at national and international conferences and has authored many articles on health-related topics. His work promotes shifting health promotion away from its traditional, biomedical, control-oriented focus. Formerly co-editor of the journal *Health At Every Size*—he has been helping people with weight and eating-related concerns for more than 15 years.

Dr. Robison is available for speaking engagements on a wide variety of health-related topics. He is also available to conduct intensive training workshops for groups and organizations that are interesting in learning about and implementing *Health At Every Size* approaches. You can learn more about Dr. Robison’s work by visiting his website at [www.jonrobison.net](http://www.jonrobison.net) and he can be contacted via email at [robisonj@msu.edu](mailto:robisonj@msu.edu).

The biographical information for co-writers Carmen Cool and Elizabeth Jackson can be found on pages 23 and 28.

All information ©Wellness Council of America (WELCOA) 2007. WELCOA provides worksite wellness products, services, and information to thousands of organizations nationwide. For more information about, visit [www.welcoa.org](http://www.welcoa.org).

**Suggested Citation:** Robison, J., Cool, C., Jackson, E. (2007). *Kids, Eating, Weight & Health*. WELCOA’s *Absolute Advantage* Magazine, 7(1), 2-15.

