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PART IV BEYOND THE CLASSROOM: THE SCHOOL AND COMMUNITY AS CHANNELS FOR PROMOTING HEALTH

Preface

I began writing *Jump Start Health!* in January 2008. I intended this book to serve as the sequel to another I had written on the topic of childhood obesity that was largely theoretical and conceptual in nature. It had a wealth of information, but it was not practical enough for the everyday classroom teacher. I empathize with busy teachers who have—what seems—a never-ending flow of demands placed on them. And to comb through pages of an academic text to construct lessons to teach not only can prove to be cumbersome, but also can exhaust treasured time and energy. In fact, many teachers become annoyed with that process and abandon that idea to do so altogether. I do not blame them; after all, they have a sea of standards to meet, expectations to fulfill, added curricula to teach alongside the core subjects, and so forth.

Yet still, there is something innately different about the topic of childhood obesity that warrants the scrutiny to accentuate what needs to be efficiently imparted to children. And that is that this is about the course of children's health, which can be altered for the better by teaching children that health is a worthy lifelong pursuit. I wanted this book to be practical enough for teachers and youth-serving professionals to easily convey this knowledge to children, and hence reinforce the likelihood that they will enjoy a better quality of life. To that end, the purposes of *Jump Start Health!* are threefold: to inform about the critical issue affecting childhood today, the obesity crisis; to provide a knowledge base on healthy diet and physical activity practices; and to offer practical approaches to impart that knowledge to children in school settings.

As I wrote this book, I noticed increasing media coverage on health and weight issues, which is unmistakably well deserved. That these matters now garner national attention is valuable because we are an overweight and obese society and health needs to hold a prominent position in the public consciousness. Pick any mainstream magazine, like *U.S. News and World Report* (childhood obesity was its cover feature on September 10, 2007) and *Time* (with featured articles with titles such as "Should Parents of Obese Kids Lose Custody?" "Do Obese Kids Become Obese Adults?" and "Lifelong Effects of Childhood Obesity"), or watch any news show, and an aspect

of health is certain to be covered. Of course, some of this is sensationalized, but the publicity nonetheless raises the awareness that behavioral changes are essential to improved health. One news piece from September 21, 2009, that caught my attention featured the photo of an adorable 8-month-old—and boy, was he huge. *Newsweek* titled the piece "Born to Be Big? Are Some Kids Fated to Be Fat?" I was shocked by the reported results of a Harvard study: Obesity levels in infants had risen 73% since 1980.

A wide range of sources confirms that our nation has a serious problem with obesity. Nearly 60% of Americans are overweight or obese (Begley, 2009), and in some states, one out of three adults is obese (Trust for America's Health, 2009). Moreover, the number of children considered overweight or obese is larger than ever before. There is no denying that excess weight is an epidemic in this country. Despite good news about children's health (immunizations have reduced the incidence of chicken pox, measles, and mumps alone), nothing can overshadow the notion that childhood obesity is an important challenge of our age that has to be addressed through a variety of forums; school happens to be one of them.

Children have to learn early on that the choices they make now contribute to their long-term health. To happen upon this information in adolescence or adulthood is too late. As most adults can attest, it is difficult to break old habits and start new ones—not to mention that obesity is difficult to reverse (Katan & Ludwig, 2010). Even though news coverage on health is widespread, there are far too many parents who do not—and cannot—model good health because they too are set in their ways or they simply do not know how. And left to their own devices, children do not always make decisions that are best for their health (McDevitt & Ormrod, 2010). In fact, they often ascribe to crazes that contradict health. Inevitably, many children adopt poor dietary and physical activity habits that they carry well into adulthood. Because children are just starting to make their own decisions and assume increasing responsibilities, it makes sense to introduce the tenets of healthy lifestyles in childhood. This is the opportune time to empower them with the knowledge and skills to make decisions that positively contribute toward their health. Without that knowledge, they will not always make the right decisions. Actually, research has shown that as children start making their own decisions, their nutrition deteriorates (McDevitt & Ormrod, 2010).

Schools are the ideal medium of this knowledge because of the two labs where teachers can reinforce the concepts of good dietary and physical activity practices: the cafeteria and the gym. More than that, schools are the very places where most people learn what life should be like. Health is such an essential part of life that why would we not teach the concepts that lead to it? Besides, schools already offer children knowledge with a preventative function (e.g., dental care, antismoking and antidrug campaigns, fire safety,

and stranger-danger precautions), so that they develop a body of skills that will serve to protect them throughout their lifespan. So too should obesity prevention be designated with that degree of significance—not to mention that classroom teachers are professionally trained to deliver instruction in meaningful and challenging ways. They know their students best, and they know how to tailor health resources to fulfill the unique needs of their students.

On that score, why consider *Jump Start Health!* a health resource? Readers will find that this book is a tool kit of background matter associated with excess weight, healthy eating, and physical activity coupled with practical approaches to teaching children how to live healthier. The first section of the book, "Coming to Terms with Childhood Obesity," encompasses two chapters. Chapter 1 is an overview of childhood obesity. Supporting data are cast purposefully throughout the discussion to underscore the impact of excess weight on individual and social health. In Chapter 2, a discussion ensues over the notion of health and wellness. Health is a far more comprehensive concept than that of feeling and looking good, and if readers fail to fully understand its complexity, they will have a difficult time convincing children that it is a worthy pursuit. Health affects many aspects of life, and readers need to know exactly how poor dietary and sedentary behaviors influence the seven dimensions of wellness so that they can effectively communicate it to children. The discussion then transitions to the media's fixed hold on personal health. It is well established that the media can influence a number of health issues, including sex; drugs; aggressive behavior; suicide; and the topic at hand, obesity (Strasburger, 2007; Strasburger, Wilson, & Jordan, 2009). Readers and children alike should recognize how the media can provoke these self-destructive behaviors. Toward the end of the chapter, federal campaigns are discussed so that readers understand how childhood obesity is being addressed at the national level.

The next section, "Nurturing Healthy Dietary Habits," consists of Chapters 3 and 4. Chapter 3 presents the material that teachers should know to augment the Ideas. The discussion focuses on the nutritional aspects of healthy eating and aligns with each of the food groups identified on the federal diagram MyPyramid. Readers are provided a snapshot of the benefits of each group, what the recommended daily amounts encompass, and how Americans fare in their consumption. Chapter 4 presents the first set of Ideas. The discussion begins with the assumptions that frame the Ideas and pivots to the considerations to be made in their delivery to children. All the Ideas were designed with the National Health Education Standards in mind, and include a rationale, objectives, suggestions to motivate the students and frame the discussion, a step-by-step approach to the lesson, guided and independent activities, and ways to conclude.

The third section, "Promoting Regular Physical Activity," parallels the pattern set in the former two chapters. The primary difference, of course, is that Chapters 5 and 6 are centered on physical activity. The discussion in this section begins with the benefits associated with regular physical activity and the problems with inactivity and then shifts to support for why the Ideas should be implemented. Readers are reminded that there is not enough time in the school day to be physically active, and children have to be encouraged to pursue physical activity. After all, it is still voluntary to be physically active, and they have far too many attractive sedentary options.

There are bound to be teachers who think that there are more important things than health and physical activity to be teaching children. In their minds, if the issue of childhood obesity was not stressed before, why now? Make no mistake, though, we have an unprecedented epidemic on our hands and children's quality of life is at stake. As a classroom teacher, you hold considerable power to educate children on matters related to academics, social skills, and values. You also hold it within you to alter a child's ability to chart his or her health for a lifetime.

The time has come to intervene in the childhood obesity crisis. *Jump Start Health!* is one way to do so.

Overview

The advocacy organization Trust for America's Health released its report *F as in Fat: How Obesity Policies Are Failing in America* in July 2009. The news was not good, nor was it a big surprise: Obesity rates across the nation climbed in 23 states and no state witnessed a decline. Mississippi became the first state to crest at 32.5%, which means that about one in three adults in that state is obese. Three other states—Alabama, Tennessee, and West Virginia—followed closely behind with percentages that ranged above 30.2%. The bulletin about the weight status of youth was just as dismal. There are nearly 25 million children who are obese or overweight—an unprecedented number in our nation's history—which is triple as many from 1980 (Trust for America's Health, 2007). Particularly sobering is that the number of overweight youth is escalating at a high rate. It does not take a rocket scientist to infer that because weight and health are closely linked, the health status of these children is rapidly declining.

With these revealing findings that give a glimpse into the modern-day conditions of children's health, it makes sense to delve into the topic of childhood obesity to understand the measures that teachers can take to help children surmount the common challenges associated with pursuing better health. In this introductory chapter, childhood obesity is explored in four sections:

- The Childhood Obesity Epidemic
- Concern over Childhood Obesity
- Time to Address the Childhood Obesity Epidemic
- About *Jump Start Health!*

THE CHILDHOOD OBESITY EPIDEMIC

By now there is hardly an American around who has not heard of this nation's childhood obesity crisis. What many do not know is that the United States is not alone at the crossroad of youth and overweight. Industrialized countries, as far away as Australia, Japan, Taiwan, Ireland, and Greece,

are wrestling with their own overweight youth as well. In this country, the rate of childhood obesity is increasing across the board regardless of where a child lives or his or her race, ethnicity, age, gender, or family's income level. With more and more children becoming overweight and obese, it is apparent why newspaper headlines, daily news programs, health experts, and youth-serving professionals are sounding the alarm, calling this crisis an epidemic.

But what has happened in the past few decades to cause this surge of overweight and obese youth? Health experts believe that most Americans lack energy balance. That is, the energy going into our bodies (by way of calories consumed) is not balanced with the energy going out (by way of calories being expended). Quite simply, the nation as a whole is eating too much of the wrong foods and exercising too little. This pertains to children and adolescents. They simply do not have the knowledge and skills that can guide them to improve their dietary habits and increase their daily physical activity. Moreover, the adults in their lives model poor lifestyle behaviors, and often their caretakers make poor healthy decisions for them by feeding them nutrient-inferior meals and snacks. All the while, youth influence one another to conform to what is standard and acceptable (e.g., eating hamburgers and fries, snacking on candy bars, and watching hours of television).

In the following, I discuss what we know about the root causes of child obesity, namely poor dietary and physical activity habits.

A Diet of the Wrong Foods

An unprecedented number of Americans have unhealthy eating patterns. Adults are far from ideal role models with only 12% consuming a healthy diet, according to the U.S. Department of Agriculture Healthy Eating Index. Between 1978 and 1995 the number of calories that the average adult consumed on a daily basis jumped from 1,876 to 2,043 (Center for Science in the Public Interest, 2003a). Reportedly, only 22.6% of Americans consume the recommended daily serving of five or more fruit and vegetables (Centers for Disease Control, 2003a). As with their adult counterparts, what youth eat, how often they eat, and the size of their portions have shifted in a direction that leaves nutritionists and other health experts aghast.

The foods youth consume today are generally nutrient-inferior products, high in calories and fat. More than 80% of youngsters in our country consume too much fat (over 30% of total calories from fat), and 90% consume too much saturated fat (Action for Healthy Kids, 2005b). One study of 3,000 infants and toddlers found that even the very young consume too many high-calorie foods, too much sodium, and too few fruit and vegetables (Mathematica Policy Research, 2006). The U.S. Department of Agriculture (2001) reported that only 2% of all school-age youth meet the federal rec-

ommendations of eating foods from all major groups, and the Centers for Disease Control (CDC) (2006) indicated that only one youth in five eats five servings of fruit and vegetables a day. In fact, children's and adolescents' vegetable consumption decreased by 42% and 32%, respectively, between 1997 and 2002 (Centers for Disease Control, 2003a).

Milk consumption—or lack thereof—is a problem, too. The CDC noted that fewer than one in five schoolchildren drinks three or more glasses of milk a day. Throughout the years, milk drinking has fallen by the wayside as soda drinking has gained in popularity. Researchers have found that among youth, daily soda consumption has grown by roughly 100 grams from the mid-1970s to the mid-1990s (Sturm, 2005). It is particularly frightening that adolescents drink twice as much soda as milk (U.S. Department of Agriculture, 2007). This generation of youth also snacks more frequently than those of the past. In fact, snacking is a way of life for Americans, considering that nearly a third of the calories consumed are from snacks (Institute of Medicine, 2004). One study found that about 90% of 6- to 18-year-olds reported eating three snacks a day, and over 50% ate five or more snacks daily (American Dietetic Association, 2004). Youth today consume about 10 more grams of snacks a day than did their counterparts of the 1970s (Sturm, 2005). In all, snacking can add about 610 calories to a young person's diet, which would not be such a great problem *if* the snacks were healthy (Jahns, Siega-Riz, & Popkin, 2001).

Reportedly, adults and children alike consume more of the bad foods. The pattern becomes more apparent when portion sizes are explored. The portion sizes of food we eat today are larger than ever before. As an example, the average bagel today weighs between 2 and 5 ounces more than those of the 1950s. Then, a family-size bottle of Coke was 26 ounces; today a single-serving bottle alone is 20 ounces. Then, the average McDonalds meal—original burger, fries, and 12-ounce Coke—was about 590 calories. Today, the supersize Extra Value Meal—Quarter Pounder with cheese, supersize fries, and supersize Coke—equates to 1,550 calories (National Alliance for Nutrition and Activity, 2002). To complicate matters, families today eat out more often than ever before. At one time, eating out was reserved for special occasions. Now, it is commonplace for many. In 1970, Americans spent about 26% of their food dollars on meals and foods prepared outside the home; that figure is now closer to half (46%) (Center for Science in the Public Interest, 2003a). Accordingly, a third of the calories consumed by the average American comes from foods prepared by fast-food establishments and other restaurants. Some researchers claim that on average, individuals as young as 8 eat 218 restaurant meals a year (National Restaurant Association, 2002).

This may not sound like a bad trend, because, after all, eating out is a treat that the whole family can enjoy. It is convenient for parents. There is no cooking or cleaning involved, the meals are palatable and consistent, the

meals are perceived as more economical than preparing them at home, and there is an array of options for the most finicky eater. Young people enjoy eating out because it is fun and entertaining, especially when there is a toy that accompanies the meal and a commercial playscape to explore. But there is a high price for eating out often: weight gain, which occurs because the portions tend to be large (especially when there is value associated with ordering larger portions by way of marketing euphemisms such as *Supersize*, *Biggie*, *Colossal*, and *Kingsize*, adding substantially to calorie and fat content (National Alliance for Nutrition and Activity, 2002). In other words, fast-food and other restaurant meals are generally higher in saturated fat, sodium, and sugar and lower in fiber, iron, calcium, and cholesterol than foods that are prepared at home (Center for Science in the Public Interest, 2003a).

The Sedentary Lifestyles of Youth

A root cause of weight gain is lack of daily physical activity. Children and youth today are more physically inactive than ever before. Less than one in four children gets 20 minutes of vigorous physical activity a day, and only a quarter of all youth get at least 30 minutes of daily exercise (Action for Healthy Kids, 2003). About one in four youngsters (older than 12) reports no vigorous physical daily activity, and 14% report no physical activity at all (U.S. Department of Agriculture, 2005b). Among 9- to 13-year-olds, 61.5% do not participate in organized physical activity during nonschool hours and nearly one out of four does not engage in free-time physical activity (Centers for Disease Control, 2003b).

Modern technology and conveniences are to blame for much of the sedentary lifestyles youth lead today. In the war between exercise and technology, technology is far more attractive in the eyes of youth because they can use it in the comfortable confines of their home well within reach of their favorite snacks. The availability of video games, computers, the Internet, cable television, DVD players, and so forth make for popular pastimes, but they require very little exercise. Some researchers have found that youth over 2 years old average about 4 hours a day watching TV or videos, playing video games, or using the computer, and 17% watch more than 5 hours of TV each day (Michigan Department of Education, 2001). It should come as no surprise that youth who watch a lot of TV are 8.3 times more likely to be overweight than their counterparts who watch less than 2 hours (Michigan Department of Education, 2001).

The conveniences in children's lives also rob them of physical activity opportunities. Yesteryear, youth got a lot more exercise because they walked or biked to their destinations, including school. In 1969, half of all children walked or biked to school (U.S. Department of Transportation, 1969); now, about 85% of children travel to school by car or bus, and only 13% walk