

Childhood Obesity in Colorado: A GROWING PROBLEM

The impact of the epidemic
and recommendations for solutions



COLORADO CHILDREN'S CAMPAIGN

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Colorado traditionally has ranked as one of the healthiest states in the nation, a claim that reinforces a culture of activity, community and well-being. Though Colorado is ahead of the curve in this area, we aren't immune to the growing trends that threaten the health of people across the nation.

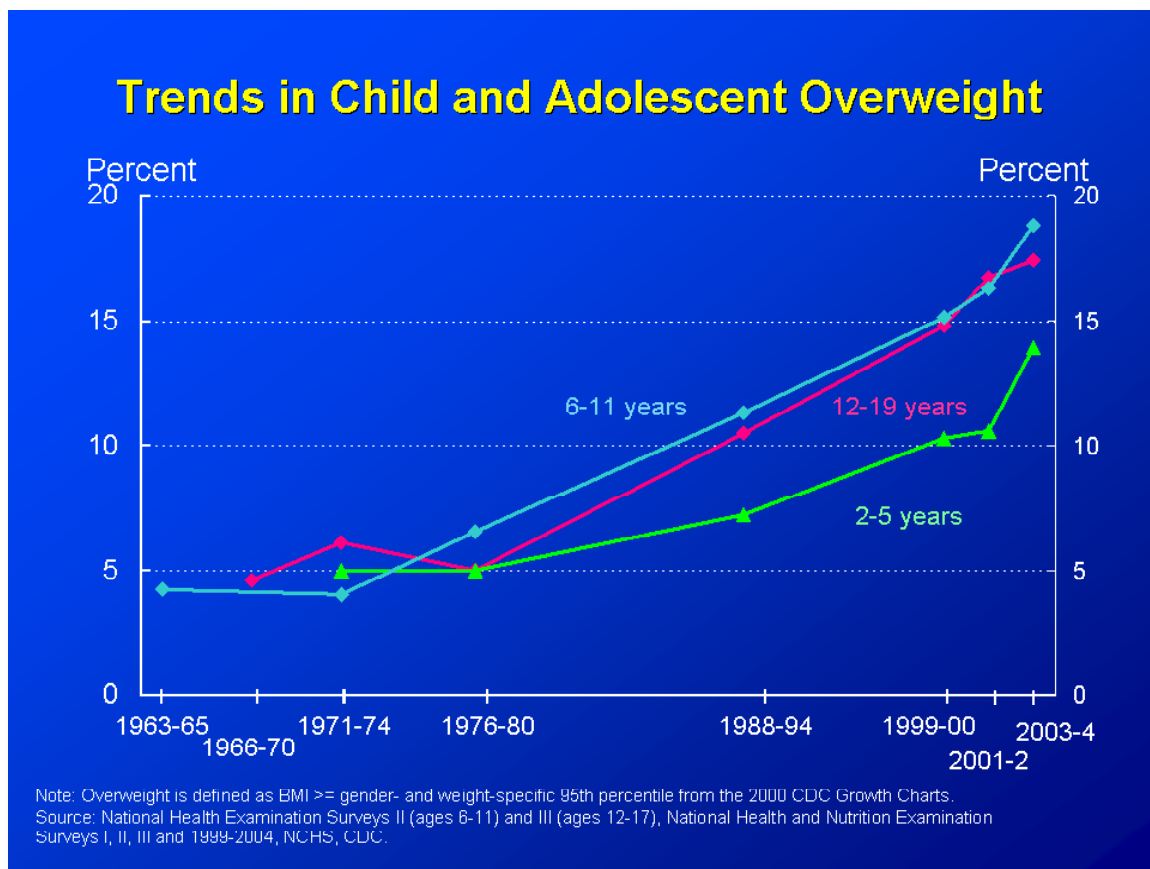
One of the most concerning elements of this trend is its impact on children. Childhood obesity is on the rise, in Colorado and across the nation. Children today are taking in more calories – eating out at restaurants more often, with bigger portions of less healthy foods, and drinking more sugary beverages than ever before. This shift in energy expenditure is compounded by the fact that kids also are less likely to walk or bike to school than they were 20 years ago and are more likely to spend their time watching television or sitting at a computer. The equation is simple: more energy in + less energy out = childhood obesity.

Obesity is linked with a number of health risks, including increased incidences of heart and liver disease, type 2 diabetes and high blood pressure. Once found primarily among adults, these diseases are now affecting more and more children, a direct result of unhealthy increases in weight. Many experts now believe that today's generation of kids will be the first generation to live shorter lives than their parents.

This is a sobering prediction, but one that is not without hope. Colorado can reverse the trend of rising childhood obesity, but it will take a coordinated effort among children, families, schools, communities and government. With its widely known culture of health and activity, Colorado should take the lead in this challenge and do all it can to support the next generations of healthy and happy children.

Megan Ferland
President

In the last thirty years, the number of children in the United States who are considered overweight or obese has doubled, from 15 percent in the 1970s to nearly 30 percent today.¹ Though Colorado ranks as one of the leanest states in the U.S., our rates of child and adult obesity continue to rise. In 2005, nearly 29 percent of Colorado children ages 2 to 14 were considered overweight or at risk for being overweight, and 53 percent of adults were overweight or obese.^{2,3} It is estimated that if current trends continue, by 2020, 76 percent of all Coloradans will be overweight or obese, while only 24 percent of the population will be at a healthy weight.⁴



The consequences of these trends can be severe, especially for children. In Colorado, obesity is associated with more than one-third of premature deaths.⁵ The Journal of the American Medical Association (JAMA) recently reported that obesity-related deaths soon will be the leading cause of preventable deaths, killing more people than smoking.⁶ Children who are overweight are more likely to develop diseases like high blood pressure, high cholesterol and type 2 diabetes, and to experience low self-esteem and depression.

In 2004, the Institute of Medicine, an independent science advisor to the federal government, released a report calling the prevention of childhood obesity a national priority. With a growing number of children in Colorado now facing childhood obesity, it is imperative that this state work toward reversing the trend and decreasing the prevalence of overweight and obese children.

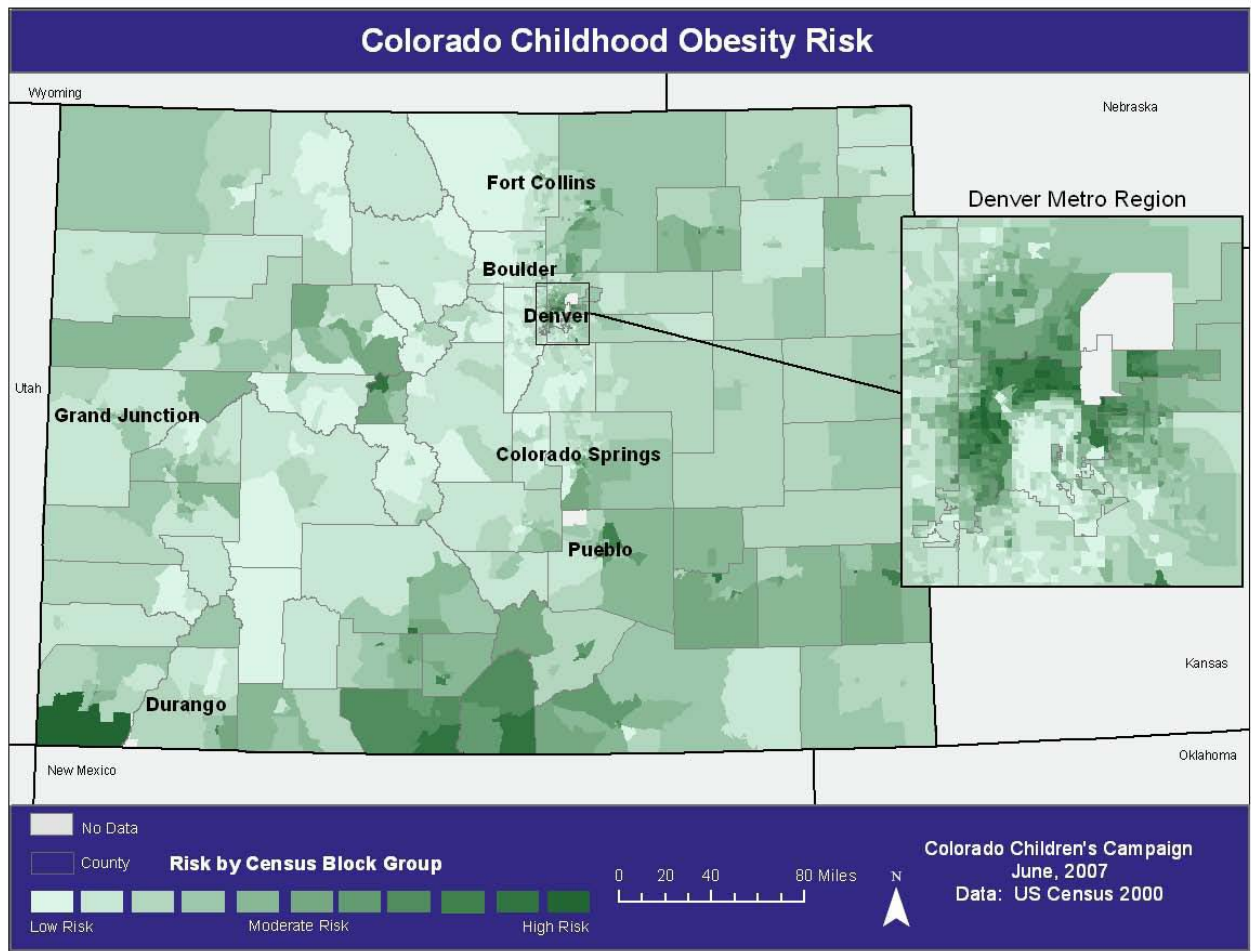
DEFINITION OF CHILDHOOD OBESITY

The terms “overweight” and “obesity” are defined by a measurement of “body mass index,” or BMI, a measure of a person’s weight relative to his or her height. The BMI is equal to weight (in kilograms) divided by height (in meters) squared. Children are assessed by comparing their BMI values with those of a fixed reference group of U.S. children of the same age and sex. The CDC defines children at or above the 85th percentile of the BMI distribution—meaning that at least 85 percent of children of the same age and sex in the reference group had lower values of BMI—as being “at risk for overweight” and those at or above the 95th percentile as being “overweight.”⁷ This definition is based on the 2000 CDC Growth Charts for the U.S.

CHILDREN AT RISK

Evidence indicates that obesity is most likely a result of a combination of genetics and environment. Children who eat more “empty calories” and expend fewer calories through physical activity are more likely to be obese than other children. Some data indicate that specific groups of children—children from low-income families, African-American, Native American and Hispanic children and children with one or more overweight or obese parents—are at a higher risk of becoming obese.^{8,9,10} For example, in Colorado, Hispanic children ages 2 to 14 are almost three times as likely as their white peers to be overweight. Colorado children living in poverty are more than three times as likely to be overweight than children in higher-income families (400% or more above the federal poverty level).^{11,12}

According to research, low-income African American, Native American and Hispanic children are at high risk for obesity.¹³ 2000 Census data shows the areas where these four risk factors are greatest.



CAUSES – A CONVERGENCE OF FACTORS

Though some children may be diagnosed with biological syndromes leading to obesity and some degree of BMI is heritable, most often, weight is gained when energy intake exceeds energy expenditure. The fact that obesity has become a national epidemic has led many researchers to explore the societal changes that may contribute to the overall trends of increasing energy intake and decreasing energy expenditure.¹⁴

No one cause has been identified as the sole factor leading to childhood obesity, rather the convergence of many factors is suspected to play a large role. Some children, particularly minority and low-income kids, watch more television, are more sedentary, and experience a higher exposure to advertisements for high-fat and high-sugar foods. Low-income neighborhoods often have more fast-food restaurants and fewer vendors of healthful foods, and kids in these environments may face more obstacles to physical activity, such as unsafe streets, dilapidated parks and a lack of other facilities.

Other potential factors that can affect children's energy intake are increases in the availability of energy-dense, high-calorie foods at school and at home; the increase in access to fast-food restaurants, particularly for minority and low-income families; the increase in advertising for sugary and fat-laden foods to children; the reduction in access to affordable fresh fruits and vegetables and the decrease in availability of grocery stores in low-income and urban areas with high minority populations.^{15,16,17,18,19}

One of the biggest changes that has affected childhood obesity is the increase in soda consumption among kids, which has contributed to increased caloric intake overall. The increase in average portion size of food servings has also been studied as a possible cause of increases in intake. As children grow, their ability to base their eating decisions on their energy needs diminishes and they are more likely to be influenced by the amount of food that is presented to them.^{20,21} Changes in the family, particularly an increase in dual-career or single-parent working families, may also be increasing both parents' and children's demand for food away from home or pre-prepared foods.

Many factors also have contributed to reductions in energy expenditure, which appears to be one of the biggest contributors to obesity. For example, one study found that although both overweight and lean adolescents take in more calories when eating fast food, the lean compensate for that energy intake, while the overweight do not.²² An increase in sedentary activity, including watching television, using the internet and playing video games, may also play a critical role. One study found that watching one additional hour of television per day increased the prevalence of obesity by two percent.²³ Other studies have consistently found that reducing children's television watching lowers their BMI.²⁴

Children today are less likely to walk to school, and they spend more time viewing television, using computers and playing video games. Some schools have scaled back physical education classes and only half of high school students in Colorado in 2005 attended PE classes at all. Additionally, only about half (54 percent) of Colorado children ages 5 to 14 were physically active for seven or more hours per week, and many continue to lose access to recess due to increasing academic demands on schools.²⁵

With schools taking less of a role in the physical education of their students, much is left to be done in the home, but many working parents have insufficient time to supervise outdoor play and may find it easier to drive their children to school rather than to encourage them to walk or bike. Other environmental factors, such as suburban sprawl and urban crime, keep children away from outdoor activities making it more likely that they will stay indoors and sedentary.²⁶

COLORADO FACTS

The 2006 statewide Child Health Survey asked parents the question: "What do you think is the most important health problem facing Colorado children today?" Of the parents who responded with a specific answer, 28 percent said "obesity and/or overweight," 14 percent said "poor nutrition" and six percent said "lack of physical activity." These issues were cited much more frequently than other common responses such as concerns over lack of health care, insurance issues, asthma and allergies.²⁷

The Healthy People 2010 goal for the percent of children and adolescents who are overweight or who are at risk for becoming overweight is five percent. Currently in Colorado, 14 percent of children ages 2 to 14 are overweight and 10 percent of high school students are overweight.²⁸ Such rates are two to three times higher for minority and low-income children.

It is interesting to note that among the national population of 10 to 17 year olds, younger children have higher rates of being overweight: 16.5 percent of children ages 10 to 11 are overweight, compared with 8.7 percent of those ages 12 to 14, and 7.2 percent of those ages 15 to 17. This seems to indicate that prevention initiatives aimed at the youngest of children would be most helpful in reducing overall childhood obesity.²⁹



For example, the formation of healthy eating habits begins early in a child's life, yet 2005 data indicate only 41 percent of children ages 1 to 14 in Colorado consume fruits at least twice per day and only 8 percent of that age group consumes vegetables at least three times per day. However, an estimated 16 percent of Colorado children that same age, consumed soda, sports drinks or other sugared beverages at least once per week and 59 percent ate fast food at least once per week.³⁰

ECONOMIC COST

The costs associated with obesity are staggering. In Colorado, annual obesity-related medical expenditures for adults is approximately \$874 million. Of that \$874 million, \$139 million was financed by Medicare and \$158 million was financed by Medicaid.³¹

It is estimated that hospital costs of treating children for obesity-associated conditions more than tripled from 1979-81 to 1997-99, rising from \$35 million to \$127 million.³² In the U.S., annual medical spending attributable to overweight and obesity is now on par with annual medical spending attributable to smoking.³³

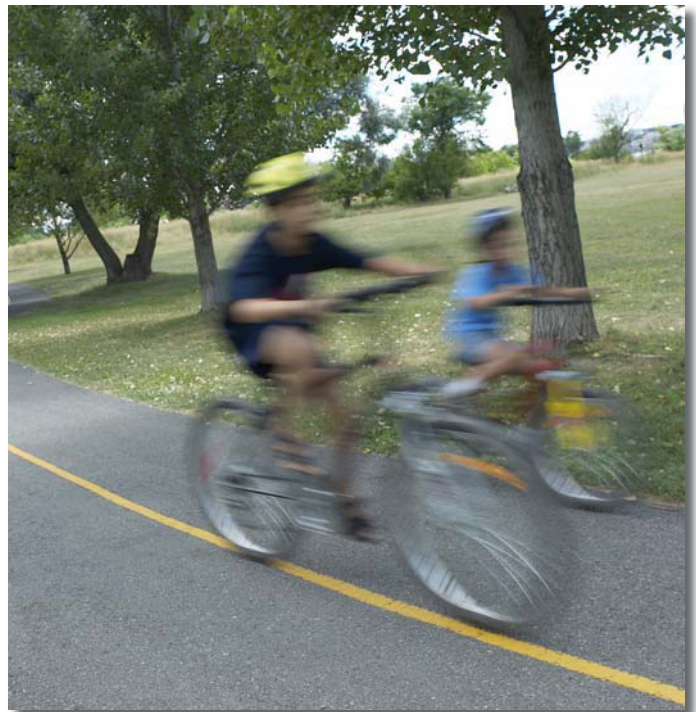
Overweight and obese adolescents are also much more likely to be obese as adults. A study from the late 1990s shows that 52 percent of children who are obese between the ages of three and six are obese at age 25. As they age, it becomes more difficult for obese adults to shed excess weight.^{34,35} It is estimated that health care costs of obese adults (non-elderly) are 36 percent greater than those of the non-obese, while costs for medicines are 77 percent greater.³⁶ The cost differences between obese and non-obese adults are even greater than those between smokers and nonsmokers. Additionally, because ethnic minority and low-income children have higher rates of obesity, the cycle of continuing health and socioeconomic disparity continues into adulthood.

In 1998, the nation spent between \$51.5 and \$78.5 billion on health care related to overweight and obesity among adults, approximately 9.1 percent of total annual medical spending in the United States.³⁷ Roughly half of this spending was publicly funded—paid for by all Americans through Medicaid and Medicare, the government's health programs for the poor and elderly.

Obese adults also may be more likely than their non-obese counterparts to become disabled before retirement, lowering their earnings and raising the costs to both Medicaid and Medicare, as they require more nursing home care moving into retirement.³⁸

Businesses also pick up much of this cost. In 1994, U.S. businesses alone spent approximately \$13 billion on obesity-related health problems: approximately \$8 billion for health insurance expenditures, \$2.4 billion for sick leave, \$1.8 billion for life insurance and close to \$1 billion for disability insurance.³⁹ Additional indirect costs of adult obesity in the U.S., including overall reductions in economic opportunity or productivity, have been estimated to be \$23 billion per year.⁴⁰

Besides direct medical costs, there are also other economic consequences of obesity. Some studies have shown that obese individuals have more difficulty gaining admission to college and that women who were obese as adolescents have less education as adults.^{41,42}



Preventing obesity in childhood is the logical and most powerful centerpiece of plans to reduce both the health-related and economic costs of obesity.

INDIVIDUAL COST

Currently, obesity is the leading contributor to premature deaths. Unhealthy eating and physical inactivity contribute to 310,000 to 580,000 deaths each year, or 13 times more than deaths due to guns and 20 times more than deaths due to drug use.⁴³

Other complications of excess weight include heart disease, high blood pressure, sleep disorders, liver disease, hardening of the arteries, metabolic syndrome, high cholesterol, asthma, orthopedic and joint complications, mental health problems and type 2 diabetes.^{44, 45, 46, 47, 48, 49} In fact, the American Diabetes Association estimates that nearly 33 percent of children born in 2000 will develop diabetes within their lifetimes. For minority children, that estimate reaches 50 percent.⁵⁰

Many obese children are developing the types of health problems that once afflicted only adults. These children must cope with chronic illnesses for an unusually extended period of time; even if disease is not diagnosed until adulthood, it begins taking its physical toll sooner, resulting in more complications and a less healthy life.

Obese and overweight children suffer from higher rates of depression, suicidal thoughts and attempts, greater difficulty in peer relationships, body dissatisfaction, eating disorders, and poorer quality of life than their normal-weight counterparts.^{51, 52, 53} A cycle also has been documented indicating that young people with depression are at greater risk of developing a higher BMI and a higher BMI is linked to the development of symptoms of depression.^{54, 55}

These difficulties often have effects on other areas of children's lives. Sleep disorders can lead to daytime sleepiness, which can negatively affect a child's concentration at school and thus his or her ability to learn. Sleep apnea specifically has also been linked to learning disabilities and memory problems.⁵⁶

Additionally, because children who are overweight are more likely than children who are not overweight to become overweight adults, they are subject to the physical and emotional effects of overweight and obesity for a larger part of their lives, which decreases their chances for living longer healthier lives.

POTENTIAL SOLUTIONS

Most children do not have control over the environments in which they live, learn, and play. They also have a limited capacity to make informed choices based on predicted health outcomes. For this reason, there is a clear rationale for modifying children's environments to make it easier for them to be physically active and to make healthy food choices, thus reducing their chances of becoming obese. The national school lunch and breakfast programs provide important nutritional safety nets for many of the nation's poorer children and further modification at a local level could ensure that these meals are increasingly healthy and served in appropriate portion sizes. State efforts to limit sales of sugar- and fat-laden foods at school could lead the way to effective obesity prevention. The Child Nutrition and WIC (Women, Infants, and Children) Reauthorization Act of 2004, for example, requires school districts that participate in the National School Lunch Program or School Breakfast Program to develop a local wellness policy by the beginning of the 2006–07 school year. Though many promising practices and programs that address childhood obesity have already been implemented, there is much left to be done.



RECOMMENDATIONS

1. Involve parents to encourage healthy lifestyles in the home⁵⁷

Children often learn by example. When parents do not have the time or ability to play with their children, to walk with them to the supermarket, to bike or otherwise be physically active with their children, kids are less likely to view these activities as valuable life skills. Creating safe sidewalks, parks and facilities, and encouraging employers to offer wellness incentives like gym memberships or “bike to work days” are all effective steps towards involving parents to serve as models of good physical health.

Teaching parents about nutrition and the importance of limiting their children’s sedentary activities is also a good mechanism for reaching children and can be accomplished through school communications like newsletters, email, health fairs, parent groups, websites or school-based health promotion programs, some of which provide follow-up materials to parents to allow them to discuss with their children the lessons they have learned in class. Many successful school and child care efforts involve parents in promoting nutrition and physical activity so that children continue to receive reinforcement at home.⁵⁸

Additionally, encouraging families to establish long-term relationships with their children’s primary and specialty care doctors who can provide ongoing coordination, guidance, resources and referrals regarding a child’s developing needs, a concept known as a “health care home,” is an important step in identifying obesity and overweight, and supporting families in addressing lifestyle changes.

Equally important is ensuring that parents continue to improve their own health and well-being so that they model positive health behaviors at home. Worksite wellness programs that encourage employees to improve their health outcomes and provide programs

and support to help them achieve goals are successful not only in improving health outcomes for their employees, but often also result in higher productivity and a decrease in overall health care costs.

Action: Increase the number of family-centered community and worksite wellness programs

Action: Increase the number of children who receive ongoing support for social, emotional and physical health via a health care home

Clayton Family Futures

The Clayton Family Futures Head Start Programs provide quality early childhood and family support services for Denver children ages 3 to 5. In 2006, Clayton Family Futures was awarded a grant to establish a workplace wellness program for its employees. “The idea was to create a healthy work environment which would reflect in our work with our students,” says Debi Flynn, Coordinator of Health and Nutrition Services.

First, the organization established a wellness committee charged with determining the scope of the program, evaluating and reporting on progress toward goals. The wellness committee developed a mission statement to “create a worksite culture that promotes healthy lifestyle choices and attitudes by assisting early childhood professionals in making voluntary behavior changes that reduce their health and injury risks, improve their consumer health and wellness skills and enhance their individual productivity and quality of life. The wellness committee’s vision statement is: “We believe health conscious early childhood professionals can shape, nurture, and encourage the development of young children’s healthy lifestyle choices.”

The wellness committee collected surveys of employee needs and interests, which helped shape the development of the program to include education about proper sleep habits, volunteering/community development, organization, nutrition, physical activity, social/relationships, and intellectual, emotional, and spiritual development.

The program itself includes monthly learning opportunities including healthy cooking demonstrations, seminars on each of the identified areas of health, and ongoing weight management, as well as walking and yoga programs for all employees.

Clayton Family Futures intends to continue its program with funding received from a vending machine stocked with healthy snacks and the sale of healthy staff lunches prepared in its own on-site kitchen.

http://www.denvergov.org/Head_Start/DelegateAgencies/DelegateAgencies2/tabid/387883/Default.aspx

2. Create community environments that are conducive to nutrition and physical activity

When children do not have safe places to play outdoors, they may spend more time indoors, playing video games, using computers and watching television— all activities that keep them sedentary, raising their risk for obesity. Studies show that children who have access to recreational facilities and programs are more active than those who do not have access.^{59, 60}

Additionally, barriers like heavy traffic, lack of sidewalks and crime keep kids from walking to school. The number of new housing sites that are suburban and low-density means that more kids are living further away from their schools. A 2002 survey found that 53 percent of parents drove their children to school and 38 percent put their children on a school bus.⁶¹ Possible actions to take include planning new communities or improving existing communities with sidewalks, trails, parks and community gardens, which may require changing zoning codes and development regulations.

Low-income and minority communities also report fewer physical activity facilities, more fast-food restaurants and fewer grocery stores, resulting in less access to and higher costs for healthy foods.⁶² Communities can proactively increase the number of farmers' markets, grocery stores and athletic facilities in low-income neighborhoods by providing incentives for these types of businesses to locate there. This will help to provide better access to healthy food and an environment where people are engaged in nutrition and social and physical activity. Some jurisdictions have recognized the importance of investing in development that supports pedestrian and bicycle safety, public health and active living by incorporating these goals into long-term planning documents and development review policies. Individual cities should assess their environmental policies and plan to take into account these factors in future planning.

City and County of Broomfield

The City and County of Broomfield has developed a plan to guide the city, its officials and its departments in making decisions that affect the growth and sustainability of the city for the next 20 years. Broomfield's 2005 Comprehensive Plan reflects policies and action steps that promote active, healthy and safe communities for children and families. Examples of these policies and action steps include:

Encouraging neighborhood streetscapes to be safe and walkable, and to accommodate bicycling;

Promoting services, programs and opportunities that proactively enhance personal responsibility, wellness, self-sufficiency and overall quality of life;

Developing and implementing programs to increase community awareness of health and wellness promotions that address prevention and education, such as smoking cessation, alcohol and drug abuse, obesity, nutrition and exercise;

Locating community facilities within community and neighborhood centers to create walkable destinations within neighborhoods;

Enhancing the link between environmental quality and community and individual health; promoting walking as a means of transportation; developing planning design standards that encourage opportunities for activity within the everyday living environment; and promoting alternatives to vehicle transportation; and

Continuing efforts to create a strong “wellness collaboration” promoting health community initiatives and an overall active community life for Broomfield residents and employees.

Available at: http://www2.broomfield.org/planning/master-plan/FINAL_COMP_PLAN.pdf

Action: Encourage cities and counties to demonstrate the importance of healthy communities in their analysis and implementation of new developments, redevelopments and community investments

3. Improve nutrition and physical activity environments within schools

Studies have found that children who are severely overweight are four times more likely than healthy-weight children to report “impaired school functioning.” Overweight children are also more likely to have behavior problems, to be placed in special education or remedial classes, and to score lower in math and reading tests.^{63,64} School performance is distinctly tied to a child’s health and schools have an unparalleled opportunity and responsibility to provide students with health education and active environments.

The Department of Agriculture (USDA) enforces standards for the nutritional content of food sold in the national school breakfast and lunch programs, but competitive foods like those sold in vending machines and snack bars are not subject to these nutritional standards. Though schools that participate in this program are prohibited from selling foods of “minimal nutritional value” in school cafeterias during lunchtime, the term “minimal nutritional value” excludes foods like candy bars, cookies, and potato chips, which schools are free to sell. However, state and local authorities may choose to implement additional guidelines like restricting non-nutritional foods or requiring nutritional standards for competitive foods, and foods sold at fundraisers or offered at school parties and meetings.

Though many school food programs rely on revenues raised from competing food sales, evidence shows that schools that have shifted to more healthful foods in cafeterias, vending machines and student stores have been able to do so without losing revenue and many, in fact, saw revenue increases in their school food programs.⁶⁵ In 2006, The Alliance for a Healthier Generation, a national initiative of the William J. Clinton Foundation and the American Heart Association, worked with five of the nation’s leading food manufacturers and some of the largest suppliers of competitive foods in schools, to develop voluntary nutrition guidelines for snacks and side items sold in schools (www.healthiergeneration.org).⁶⁶ Individual schools, districts and the state should consider implementing these guidelines broadly to raise the quality of vending machine products offered to children. Additionally, Colorado should consider similar guidelines for its school lunch program that exceed existing USDA guidelines for nutritional content.

Some of the most successful school efforts to prevent and reduce obesity and promote healthy lifestyles are comprehensive programs. They consist of nutritional meals, nutrition education, physical activity, health education, recess, and sports programs and clubs, which help children develop lifelong habits that protect them well into adulthood.⁶⁷ Studies have shown that physical activity programs improve students’ social skills and mental health and reduce risk-taking behaviors.⁶⁸ Increasingly, however, schools have felt pressure to focus on academic accountability, which has led to the elimination of “nonessential” areas of study including nutrition and physical education even though evidence suggests that the cognitive benefits of physical activity during the school day compensate for time not spent on other academic areas.^{69,70,71} Over 95 percent of Colorado parents surveyed in the statewide Child Health Survey reported support or strong support for physical education requirements in schools, even if it meant that physical education might take time away from other subjects.

The U.S. Department of Health and Human Services and the U.S. Department of Agriculture recommend that children and adolescents engage in at least 60 minutes of physical activity on most days of the week.⁷² The National Association for Sports and Physical Education also recommends 150 minutes per week of physical education for elementary students, 225 minutes per week for middle school students and the requirement of two credits of physical education for high school graduation. These recommendations have been adopted by the Alliance for a Healthier Generation as well as the Metro Denver Health and Wellness Commission, a coalition of over 80 community leaders across the Metro Denver area who have focused on promoting policies and programs that support a culture of healthy eating and active living in schools, work-sites and communities.⁷³

Schools can begin to reverse the obesity trend by increasing not just the time spent in physical education classes, but the actual time students spend engaged in vigorous exercise. The state can further support this idea by requiring some kind of physical education or activity, including recess for younger students, in all schools, enhancing the quality of physical education and supporting basic and ongoing education for physical education instructors. Individual districts, schools and teachers can also work to integrate physical education into other curricula to reinforce its importance.

Currently, Colorado does not require physical education teachers to be certified in physical education, while nationally, 73.2 percent of schools require newly hired physical education teachers to be state-certified, licensed, or endorsed in physical education.⁷⁴ The U.S. Centers for Disease Control recommends certification because these educators often provide longer and higher-quality programs for their students.⁷⁵ Colorado could explore implementing such a requirement.

Additionally, it is not known to what extent physical education programs are being implemented in Colorado schools, as comprehensive information about physical education and physical activity programs is not collected by any official entity. The state also could explore the option of developing reporting measures for all schools to promote accountability in quality and to allow parents, communities, and decision-makers to gain a better understanding of the ongoing state of physical education in Colorado.

Action: Develop statewide standards for competitive foods served in schools that meet or exceed those of the Alliance for a Healthier Generation and statewide standards for school lunch and breakfast meals that exceed current USDA standards.

Action: Require physical education teachers in Colorado to be endorsed or certified

Action: Increase the number and quality of physical education, physical activity and nutrition education programs in Colorado schools

Action: Develop physical education reporting standards and require the state to collect information on physical education program standards, design and performance on an ongoing basis

4. Support After-School Physical Activity and Education Programs

Schools and child care centers must be supported with the funds and training required to implement obesity-prevention programs. After-school programs also serve a growing number of children, especially low-income and minority children, and strengthening physical activity and nutrition within this venue is an option for schools seeking to minimize conflicts with the academic mandates required in the classroom. The Institute of Medicine supports partnerships between schools and the public and private sectors that provide funding and opportunities for sports activities and other after-school programs.⁷⁶ This could include agreements made with local health club facilities, parks, hospitals or other organizations to provide physical activity facilities and health education. Many of these programs also are eligible to receive federal funds to provide snacks, dinners and summer food services to child participants.⁷⁷

In Colorado, after-school physical activity and education programs receive community support from grants, donations and fees. State funding is provided primarily through the Tony Grampas Youth Services Fund, a program that in FY 2004-2005 provided support to over 104 programs focusing on early childhood learning, student drop-out prevention and mentoring.⁷⁸ To the extent that these programs provide opportunities for social and emotional growth including self-regulation; physical activity that consists of moderate to vigorous exercise; or time spent on activities other than television, video games and other sedentary activities where children tend to snack; these types of programs can be beneficial to children with little access to these experiences in school or at home.



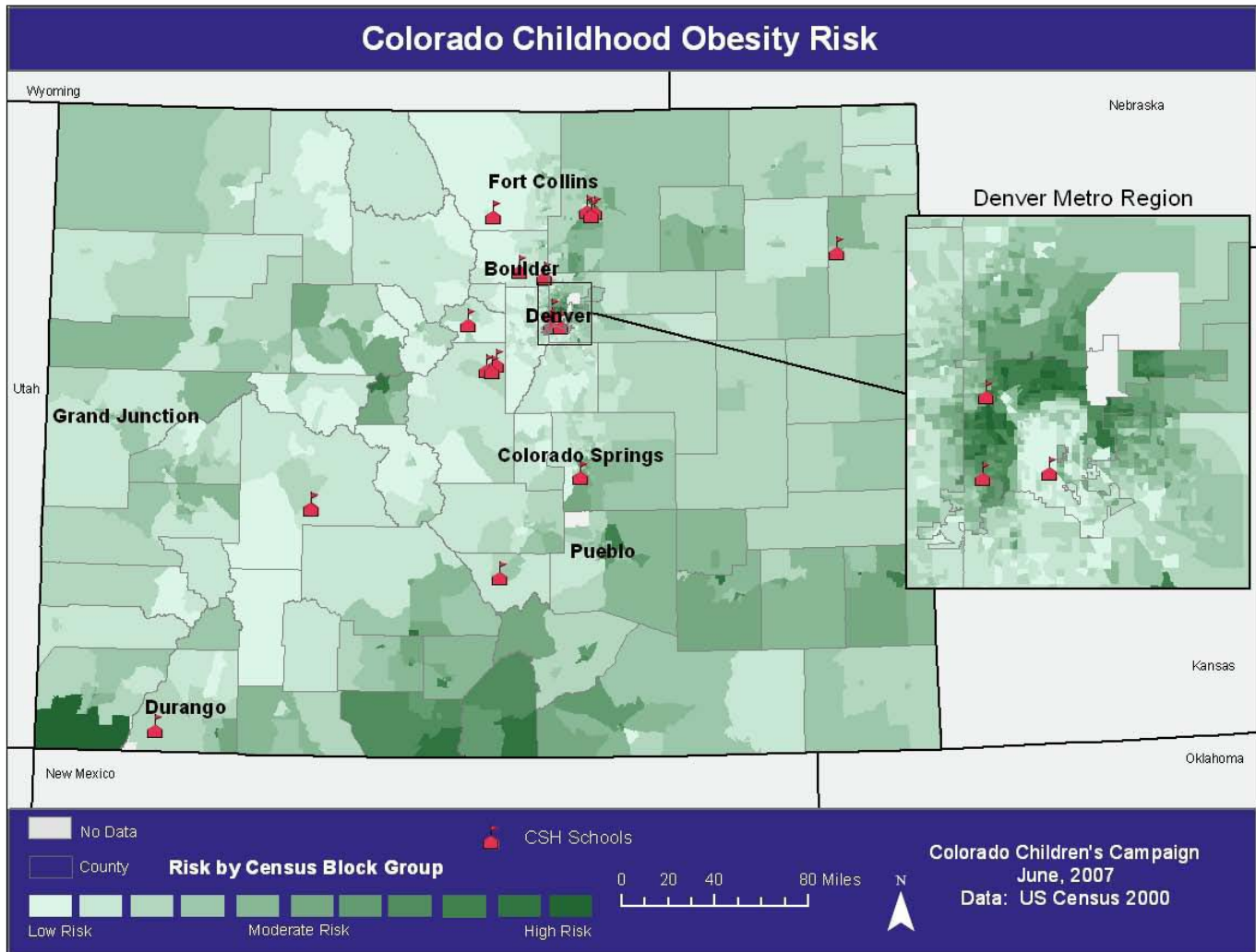
Action: Continue to support after-school programs with specific emphasis on those that provide some instruction on physical education and health

5. Support and Expand School Health Services

School health services can play an important role in identifying and reducing childhood obesity and overweight. School nurses and health personnel can provide risk screenings, physical exams, nutrition and physical activity guidance and referrals, which are particularly important for low-income and uninsured students who may not have access to these services otherwise. In fact, adolescents who did not have health insurance were found to be twice as likely to be overweight compared to adolescents with private health insurance, which underscores the need for school health services to be involved in this type of screening and care.⁷⁹ Participants in one survey cited nutrition services as school health's most important prevention activity.⁸⁰

Though all schools in Colorado are subject to the overall rules set forth by the General Assembly and by the State School Board, the district school board is responsible for local decisions that affect groups of schools. Beyond that, individual principals and teachers are responsible for implementing curricula that could enhance physical and health education and services.

Because of the wide range of school health services provided in some schools, including but not limited to physical education curricula, physical activity, school-based clinics, school nurses, and food service staff, it is imperative that these groups coordinate their efforts and resources to better provide services to their students and reinforce healthy living messages. Colorado currently pilots a Coordinated School Health Program in a number of schools to provide a mechanism for coordination of services and resources. Expansion of this program statewide with resources for training and building-based work could prove a valuable asset for schools in the future. Additionally, a coordinated school health team within each school could take responsibility for updating and adhering to its school wellness policy.



Colorado Coordinated School Health Teams, Colorado Connections for Healthy Schools, <http://www.cde.state.co.us/cdeprevention/pilotprogs.html>

Additionally, some states have institute local school health councils to act as advisory groups to local school boards. Members of these councils are local doctors, teachers, nurses, dieticians, parents and others who can provide a well-rounded perspective on local school health policy. These councils have been asked to review potential curricula, provide input on school wellness policies and to offer support for coordination of school programs that address activity, education and nutrition.

Action: Expand Coordinated School Health Programs statewide

Action: Create Local School Health Councils with specific duties and responsibilities.

6. Encourage smart consumption

A child watching Saturday morning television may see one food commercial every five minutes, with nearly half featuring foods like candy, soft drinks, chips, cookies and fast food.⁸¹ Although studies have not found a conclusive link between the content of advertising and obesity, they have shown that children find advertisements very persuasive and that, in turn, children successfully influence their parents' food purchases.^{82,83} Low-income and minority children, who have a higher chance than other children of becoming obese, are exposed to more advertising with more negative health-related content than other children.⁸⁴ One strategy is to reduce advertising time for energy-dense foods aimed at children or to mandate that ads for junk food be balanced with advertising for healthy foods such as fresh fruits and vegetables.

Another way to do this is to ban advertising within schools for food products that are high-density, low-nutritional value, including advertisements in school newspapers and yearbooks and in contracts with outside vendors including those who sell food, provide sponsorships, or broadcast into classrooms via television or radio.

It is equally important to promote good knowledge of nutrition. One study documents an increase in the number of calories consumed away from home increasing from 18 percent in 1977 to 34 percent in 1995, uncovering an opportunity to provide consumers with nutritional information.⁸⁵ One strategy is to require restaurants to display nutritional information for their meals on menus or otherwise clearly in sight to enable families to choose healthy options. Another is to encourage restaurants to provide order options that are smaller in portion size.

Finally, schools can be a logical place for students to learn how to be “health literate.” Children today frequently make their own decisions about what to eat with little or no adult supervision and evidence suggests that school-based nutrition education improves kids' eating behaviors. A comprehensive health education curriculum ensures that students know how to access high-quality information on nutrition and health services; develops the goal-setting and decision making skills students need to be proactively healthy throughout their lives; and strengthens their abilities to think critically about advertising, media and social factors that affect their health.⁸⁶

Action: Encourage restaurants to provide nutritional content information that is easily accessible and understandable.

Action: Establish school policies on outside advertising.

Action: Integrate quality nutrition education as part of a comprehensive health education curriculum.

In 2005, the Colorado Physical Activity and Nutrition program launched the Smart Meal program, a community-wide effort to provide healthier menu options for customers. As part of this program, the Smart Meal Seal was developed to provide an easy for consumers to identify healthy menu options in restaurants. To earn the seal, a meal must meet the following criteria:

- Minimum of two servings of beans, whole grains, fruits or vegetables (only one serving for a side dish)
- No more than 700 calories (300 for a side dish)
- No more than 30 percent total fat
- No more than 15 percent of total calories from saturated fat
- No more than 0.5 grams of trans fat (no added or artificial trans fat)
- No more than 1,500 milligrams of sodium (650 mg for a side dish)

Some restaurants participating in this statewide program include:

110 McDonald's stores (Denver-metro area), Kates on 35th Ave, Beau Jo's (7 locations), Delectable Egg (4 locations), Great Harvest (Colorado location), Masaalla Indian Restaurant

Visit www.livewellcolorado.com for more details.



7. Support improvements in prevention and treatment strategies for overweight and obese children

Many doctors feel ill-equipped and untrained to handle the diagnosis, treatment and care of overweight and obese children. According to an annual survey of Colorado parents conducted by the Colorado Department of Public Health and Environment, in 2006, fourteen percent of Colorado kids ages 2-14 were overweight, but only 3.2 percent of parents reported being told by their child's health care provider that their child was overweight. Many doctors also report insufficient time and resources to dedicate to these kids and do not have access to support services for their clients, including mental health professionals, nutritionists or exercise physiologists.⁸⁷ Medical schools and pediatric residency programs should train physicians in how to prevent obesity and how to manage its associated health problems, with particular emphasis on cultural sensitivity related to high-risk populations. Providers also can take steps to co-locate with specialty health providers in pediatric offices when possible to more easily refer children for those services. And practices can continue to form relationships with nutrition professionals who can provide ongoing guidance. Support for the development of health care homes, or care-providing entities that coordinate all aspects of a child's medical care, could also improve care for kids who need a variety of services.

However, in rural, low-access areas this could be difficult to accomplish, and reimbursements for providing such services are often minimal, if available at all. Many health insurance companies also do not reimburse providers for delivering weight-management, preventative and obesity-related care, and federal law does not mandate state reimbursement to providers for these services.^{88,89}

Because many insurance companies do not recognize obesity as a disease, reimbursement for preventive services can be difficult. Thus, rather than a cost-effective approach that focuses on prevention, many providers are faced with the reality of treating and billing for the costly secondary effects of obesity, such as diabetes and cardiovascular disease. On average, the cost to insure someone without diabetes for one year is approximately \$2,700.00. The cost to insure someone with diabetes is \$13,243.00 — nearly five times higher.⁹⁰

Colorado does not mandate that private insurance, Medicaid or the state Child Health Plan Plus (CHP+) programs cover obesity as a disease. However, instituting a health care home model could prove effective at helping children and adults reduce overweight by eating better and exercising more.

In July 2004, the Department of Health and Human Services removed language from the Medicare Coverage Issues Manual stating that obesity was not an illness. Policymakers should take similar steps for the public and private health care systems that serve children.

Action: Provide public and private health care coverage for obesity and overweight that is no less comprehensive than that for obesity-related illnesses



Prowers County It's About Kids

Prowers County is located in the Southeast corner of Colorado within close proximity to both the Kansas and Oklahoma borders. Prowers County is an agriculture community with most of its income generated by agriculturally related businesses. According to the 2007 KidsCount in Colorado! data, the median household income of Prowers County is \$29,647 (compared to \$50,105 for Colorado) and nearly a quarter of the county's families live below the self-sufficiency standard, a measure of adequate income for a family that allows them to meet their most basic needs. There are approximately 4,000 children in Prowers County under age 18, with 29 percent below the age of five.⁹¹

In the county's largest city, Lamar, the Prowers County Nursing Service reported 13.9 percent of 2003 WIC participants aged 2-5 were obese. In determining how to tackle the problem of rising childhood obesity rates, county partners examined their community's goals and assessed their existing strengths. Finding a need for education and awareness, the partners saw a natural opportunity to work with an already strong network of early care and education agencies that included the High Plains Community Health Center, Lamar Chamber of Commerce, Mothers of Preschool Children and Prowers County Public Health and Nursing Service, among others. Through a grant from the Colorado Health Foundation, the Prowers County It's About Kids Advocacy Network, a local consortium of child advocates, was able to organize community outreach and support activities aimed at involving parents and early care providers as promoters of child health and wellness.

Prowers County will be offering a 15-week pilot child exercise class in the summer of 2007 which will coexist with a parent fitness classes. This class will be taught by a professor from Lamar Community College and will be publicized by the Welcome Home Child and Family Development Center. The class will provide quality physical activity for young children while allowing parents to engage in fitness activities at the same time.

The county will also provide each of the 21 licensed early care providers in Prowers County with a gift card to be used for the purchase of physical activity equipment for their children upon the completion of a physical activity and nutrition class. These classes will give providers the knowledge they need to offer quality physical activity and nutritious meals in their early care settings and could be used as continuing education hours to met licensing requirements. Additionally, the county will hold two luncheon workshops this year to provide community members with information about the importance of exercise and nutrition and will offer scholarships for children.

"If this comprehensive program is successful, it could become an integral part of our community's ongoing action plan," said Courtney Holt, Prowers County It's About Kids Coordinator. "If our children get the same healthy messages and experiences from the time they're young, they will grow up to be strong and healthy adults."



8. Encourage High-Quality Preschool and Early Care Environments

The percentage of overweight preschool-aged children (2 to 5 years) in the U.S. is now nearly 14 percent and has more than doubled over the course of the last 30 years.⁹² Almost one in four preschoolers is either overweight or at risk of overweight.⁹³ Now that participation in child care in the U.S. is higher than it has ever been, there is a unique role for early care environments in the fight against childhood obesity.

A large portion of children in early care settings are in licensed child care homes and child care centers. These homes and centers receive federal funds to provide meals and snacks to children through the Child and Adult Care Food Program (CACFP); however, these meals and snacks do not have to meet specific nutrient-based standards.⁹⁴ Additionally, many children this age may not be getting the recommended two hours of physical activity a day.

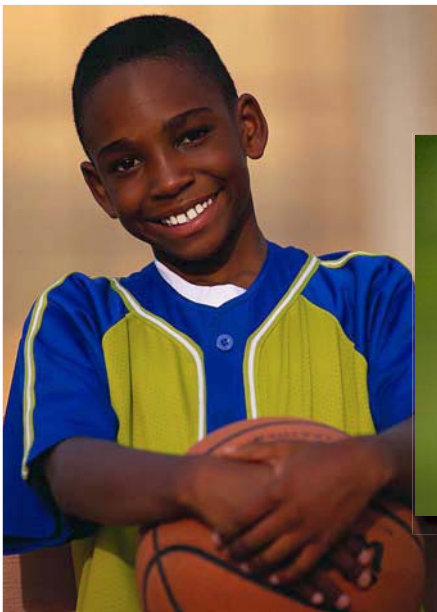
States are responsible for their own nutrition and physical activity standards in early care settings and enforce these standards through licensing and certification. However, many states are struggling with a lack of funding or coordination for this regulation. Additionally, there are a number of children in other types of care, such as care in the home of a family member, that do not require licensing.

Improving the quality of child care environments is a critical intervention. Supporting continuing education for child care workers and strengthening licensing requirements with regard to staff-child ratios, adherence to dietary guidelines and evidence-based physical education programs could help improve child health in these settings and at an early age.

Action: Support quality child care environments including ongoing training in nutrition and physical education for early care providers

CONCLUSION

It is important for Colorado to be proactive in the fight against childhood obesity. Although Colorado currently compares favorably with other states on this issue, with an epidemic across the country, comparisons with average rates are not the best measure. Furthermore, the prevalence of overweight and obese children in the state is growing and the costs and long-term effects of the problem are already high and will continue to increase. The problem is particularly urgent given that minority and low-income children, rising populations, are disproportionately affected and yet most likely to benefit from a change in public policy. The good news, however, is that this is primarily a preventable medical condition. With cooperation between parents, communities, local school districts, and the state, we can take important steps toward reducing this problem and saving lives and resources in the process.



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