SEDENTARY KIDS:

Why Food And Drink Bans Won't Solve Childhood Obesity

The hysteria about childhood obesity has reached a fever pitch. From California to Connecticut, regulators have proposed laws to limit the sale of soft drinks and snacks in public schools, as if those were the sole reason for childrens' expanding waistlines. Not to be left out, trial lawyers are now pursuing high-profile lawsuits against companies for putting sodas in schools. But in the rush to regulate and litigate, few reformers and fewer trial lawyers stop to apply the same scientific reasoning schools are supposed to be teaching kids. Will banning soda and snacks really solve childhood obesity?

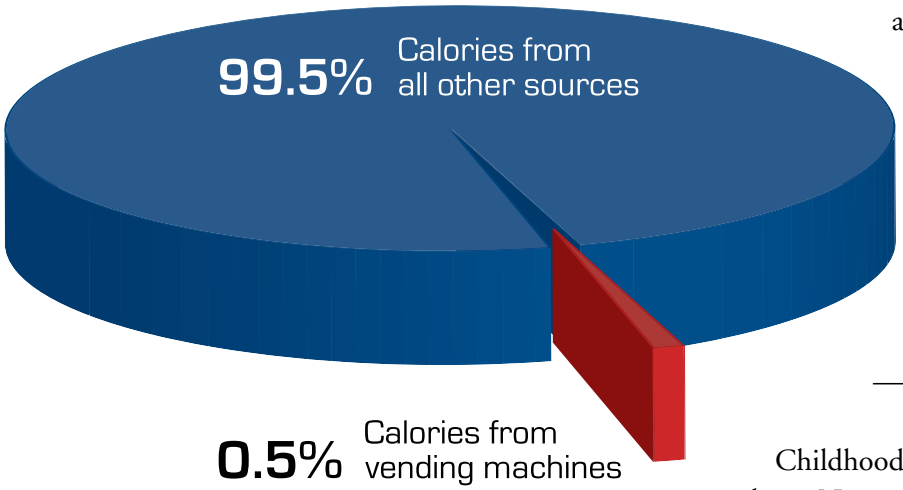
The science says it won't. An overwhelming number of peer-reviewed studies have shown that there is little linking soft drinks and snacks to childhood obesity. Furthermore, a 2002 study published in *Obesity Research* pointed out that kids get only one half of one percent of their calories from vending machines.[1]

When it comes to really explaining childhood obesity, the scientific research clearly indicts a likely culprit: physical inactivity. In 2003 then-Food and Drug Administration Commissioner Dr. Mark McClellan pointed out that "actual levels of caloric intake among the young haven't appreciably changed over the last twenty years."[2] What has changed is the amount of exercise kids get. Today they are much more likely to be driven to and from school, for example. And when they get home from school, they are much more prone to spend their afternoons indoors playing video games or surfing the Internet. A sedentary nation is a fat nation —and it has fat kids, too.

Childhood obesity is a small part of a larger societal problem. Narrow-minded politicians that ban certain foods while ignoring physical activity and other causes of obesity only distract from a societal solution.

Sources of CALORIES

For children ages 2–18



(Source: *Obesity Research*, 2002)

The Real Culprit: PHYSICAL INACTIVITY

Forty-nine of 50 U.S. states do not require daily physical education classes in school.[3] In fact, an October 2004 report from the Institute of Medicine found that daily physical education classes are only offered in 8 percent of elementary schools, in 6.4 percent of middle schools, and in 5.8 percent of high schools.[4] A 2000 article in the journal *Pediatrics* noted: "[O]nly 21.3% of all adolescents participated in one or more days per week of PE in their schools."[5] The Centers for Disease Control and Prevention states: "Only about one-half of U.S. young people (ages 12–21 years) regularly participate in vigorous physical activity. One-fourth report no vigorous physical activity."[6]

- "[In] a debate in which foods themselves are being held to be largely responsible for increasing levels of obesity, actual levels of caloric intake among the young haven't appreciably changed over the last twenty years."[7]

—Then-FDA Commissioner Dr. Mark McClellan, 2003

- "It is often assumed that the increase in pediatric obesity has occurred because of an increase in caloric intake. However, the data do not substantiate this."[8]

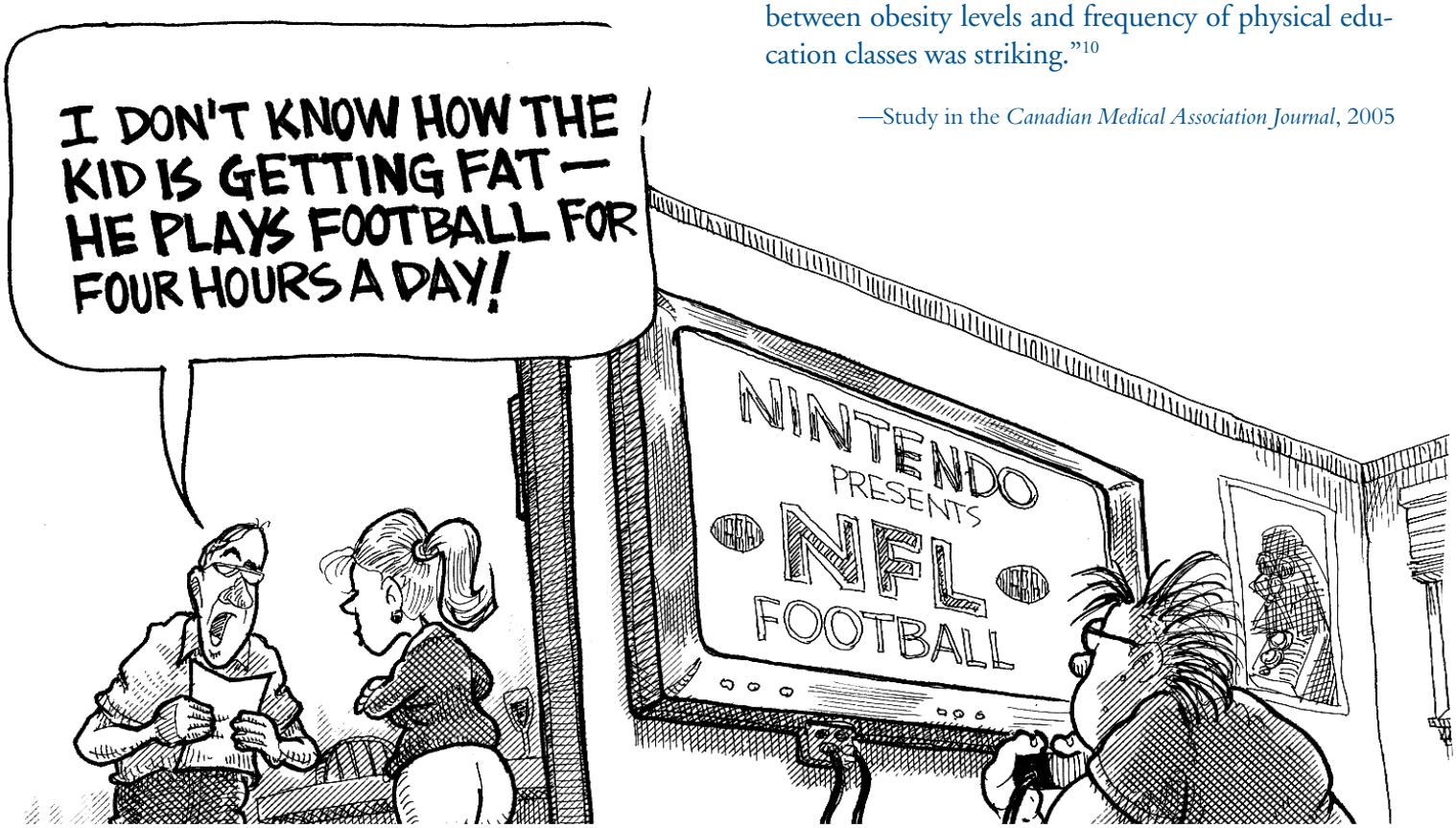
—Study in the *Journal of Clinical Endocrinology & Metabolism*, 2004

- "These results suggest that habitual activity plays an important role in weight gain, with no parallel evidence that energy intake had a similar role … the drastic decline in habitual activity during adolescence might be a major factor in the doubling of the rate of obesity development in the USA in the past two decades, since no concomitant increase in energy intake was apparent."[9]

—Study in *The Lancet*, 2005

- "Children attending schools with more frequent physical education classes were increasingly more likely to have normal body weight … [T]he association between obesity levels and frequency of physical education classes was striking."[10]

—Study in the *Canadian Medical Association Journal*, 2005



- "Of the 7 dietary and physical activity variables examined in this cross-sectional study, insufficient vigorous physical activity was the only risk factor for higher body mass index for adolescent boys and girls."[11]

—Study in the *Archives of Pediatrics and Adolescent Medicine*, 2004

- "The lack of evidence of a general increase in energy [food] intake among youths despite an increase in the prevalence of overweight suggests that physical inactivity is a major public health challenge in this age group."[12]

—National Institutes of Health researchers in the *American Journal of Clinical Nutrition*, 2000

- "[T]here has been no relationship between either total energy intake or fat consumption and the prevalence of clinical obesity over the last 60 years, whilst proxy measures of physical inactivity (TV viewing and car ownership) are closely related."[13]

—Review in the *British Medical Bulletin*, 1997

- "Physical activity represents our most effective strategy for obesity and the one for which the most substantial body of evidence exists."[14]

—Dr. William Dietz, director of the Division of Nutrition and Physical Activity of the Centers for Disease Control and Prevention, 2002

The Best-Laid **BANS...**

If science isn't enough to stop a ban on sodas and snacks in schools, consider this: bans tend not to keep such things out of kids' hands.

The Des Moines Register has reported that students simply leave school grounds when confronted with a ban: "A line of students stood outside a convenience store near East High School during the lunch hour Wednesday. Two at a time, they were allowed inside to purchase pop or other snacks they can't get at school." [15]

One Texas high school's ban on snack foods has created a thriving black market for candy bars and other sweets, reports the *Austin American-Statesman:* "The candy removal plan, according to students at Austin High, was thwarted by classmates who created an underground candy market, turning the hallways of the high school into Willy-Wonka-meets-Casablanca."[16]

Physical Inactivity Starts At HOME

The playground is not the only place where children have become sedentary. After the school bell rings, kids no longer go home to play outside. Instead, they watch TV, play video games, or sit in front of a computer.

Did you know that substituting as little as 30 minutes of TV with slow walking can promote weight loss?

Small changes over time add up to big results. An average person walking slowly for 30 minutes per day can lose 6.6 pounds in one year.[19]

Fifty years ago, less than one in ten households owned a television set, and TV remote controls were still considered a luxury item. But society has changed. Television viewing is now the most popular recreational activity and accounts for a higher percentage of leisure time than movies, sporting events, books, video games or gardening combined.

As a result, today's kids just aren't moving as much as previous generations. Between 1981 and 1997 the number of children participating in outdoor activities declined 50 percent, mirroring television's steady rise.[17] Americans in the 21st century spend an unprecedented amount of time watching television. In 2006 the average American spent more than two months of the year (1,672 hours) watching television. And remote controls ensure that the time spent on the couch involved as little movement as possible.

The amount of time devoted to television strongly influences weight. In fact, time in front of the tube correlates with body mass index (BMI) more significantly than activity or diet, recent research indicates

- "Most children aren't playing outside anymore, not in the woods or fields or canyons. A fifth-grader in San Diego described his world succinctly: 'I like to play indoors better 'cause that's where all the electrical outlets are.'"[20]

  —Article in *Sierra* magazine, 2006

- "Coinciding with declines in children's physical activity is an increase in children's exposure to sedentary recreation opportunities, such as television (TV) viewing, electronic games, and computer use."[21]

  —Study in the *Medicine & Science in Sports & Exercise* journal, 2006

- "Viewing television, using computer and playing digital games are mainly low-energy activities. In addition, they compete for the same time resource as physical activity and other non sedentary activities … There was a statistically significant trend between the increased time spent on viewing television and the prevalence of overweight among boys and girls."[22]

  —Study in the *International Journal of Obesity*, 2005

Childhood Obesity is a **SOCIETAL ISSUE** That needs a **SOCIETAL SOLUTION**

Contributors to childhood obesity can be found not just in the selection from the cafeteria lunch line but in choices from daily activities: elevators or stairs, ride or bike, car wash or hand wash, etc. While the caloric intake of children has remained relatively stable over the last several decades, the lifestyle of American youth (in school and at home) has altered dramatically.

While some of the public is aware of the startling statistics about the rise in television viewing or the drop in PE programs across the nation, many people remain unaware of the smaller threats to children's playtime. By 2004, almost 40 percent of school districts had eliminated recess and many schools had outlawed the most vigorous games: running, tag, kickball, and touch football.

These disappearing games burn a considerable amount of energy, and replacing intense activities with more sedentary tasks contributes largely to weight gain among children.

The majority of kids' waking hours are spent at school, so a few changes in the school curriculum could have a large impact over the course of a year. Removing a 30 minute recess may not seem like much, but research shows a strong correlation between the disappearance of physical education and weight gain among kids. One study estimated that five hours of PE per week could diminish obesity risks by 9.2 percent.[23]

Many schools have outlawed tag,kickball, and other highly active games during recess. Physical education classes have almost disappeared from schools as well. And at home children sit in front of a television, video game, or computer screen instead of playing outside with friends. Small changes—engineering physical activity out of American daily life—have collectively contributed to weight gain among youth.

- **Labor-Saving Devices:** Technology engineers physical activity out of day-to-day life, resulting in weight gain for many kids. Remote controls, vacuum cleaners, snow blowers, and self-propelled lawn mowers mean chores can be done with half the energy in less time. Some health officials estimate that the energy discrepancy between automated tasks and active tasks can be as much as 8,800 calories a month, a significant impact on the nation's waistlines. [24]

- **Sleep Deprivation:** Many studies show that sleep loss adversely affects appetite hormones, explaining the link between sleep deprivation and weight gain in children.[25] As electronics, caffeine, and increasingly busy schedules become more standard in family life, sleep gets pushed aside. People get one to two hours less sleep today than their 1950 counterparts, and obesity rates mirror that decline.

• **Transportation Changes:** Seemingly small changes in travel have a big impact on weight. One study estimates that a person's risk of obesity increases approximately 5 percent for every additional hour per day in the car.[26] Compared to the generations before them, today's households own more cars, travel farther, and spend more time on the roadway. Only 14 percent of today's kids walk or bike to school, down from 60 percent four decades ago.[27] Even short walks to work, to the store, and to school are being replaced with trips in the car.

• **Thermostat Control:** In air-conditioned or heated settings, the body uses fewer calories to preserve its internal temperature. Consequently, the increasing use of climate controlled environments lowers metabolism and increases weight gain. The energy difference for people in a mildly cold environment versus one that's climate-controlled can be as much as 347 calories per day.[28] Many classrooms and homes in the mid-20th century regulated climate by opening or closing a window. But today's schools, office buildings, and houses rely heavily on air-conditioning and heating to maintain a constant temperature.

Diet TRUTH

When it comes to obesity, the science suggests that a calorie is a calorie. What's bizarre about most soda bans is that a typical can of soda contains no more calories than an identical serving of many fruit juices. What's even more bizarre is that some bans cut out diet sodas, which contribute not one calorie to any child's diet. The American Obesity Association's Judith Stern wrote in the *Sacramento Bee* on September 21, 2005: "Although many perceive juices and juice-based drinks to be more healthful than sodas, that is not necessarily true. Twelve ounces of apple juice contains nearly 160 calories (more than a regular 12-ounce Coke or Pepsi), and most of those calories are in the form of sugars … [Diet soda] contains few if any calories. Which is more likely to help with excess calorie intake? Not the apple juice."[29]

"Although many perceive juices and juice-based drinks to be more healthful than sodas, that is not necessarily true."

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