



The Skinny on Obesity

Americans are getting fat. All of us – citizens of every age, gender, race, ethnicity and region of the country. Even infants are growing dangerously overweight. Latest figures (pardon my pun) show that Colorado is the only state with an obesity rate less than 20%. In 32 states, one quarter or more of the population are obese and in 6 states the obesity rate exceeds 30%. In the last thirty years, the incidence of obesity among 2-5 year olds has doubled, among 6-11 year olds the rate has increased two and a half times, and three times as many teenagers are now obese. And our epidemic is spreading abroad. 10% of children worldwide are overweight. Today, even citizens of the so-called nations with developing economies are living heavier (not better nourished) and shorter lives.

Along with the extra weight comes significant costs to human health and to the economy. Overweight children are prone to developing at least 35 serious medical problems as adults, including diabetes, high blood pressure, heart disease, depression, bone and joint disease, sleep apnea, liver and kidney disease. For the first time ever, Americans are living shorter life spans than the previous generation. Chronic diseases that used to appear only in adulthood are now appearing during childhood, becoming more severe with age. Seriously overweight children report a five-fold higher incidence of low quality of life compared with their healthy-weight peers. Their functional limitations are similar to that of children with cancer. Even academic achievement suffers under the complex burden of poor physical condition. Studies demonstrate a direct correlation between physical fitness and math and reading scores on the SAT. As the prevalence and consequence of overweight and obesity rise, so too do the costs borne by individuals and society. When hospitalized, obese children and teenagers average \$1200 higher charges and longer hospital stays than their lower weight peers. Today, hundreds of billions of dollars go to treating complications of excess body weight. More

than half of this sum is paid by public expenditures through Medicaid and Medicare.

How did we get ourselves into such critical condition? Some well known causes include both affluence and poverty (you can't win), eating out, government subsidies to meat producers, cornmeal processors and beverage industries, advertizing, less physical activity, less sleep, office work, urbanization, the family car (actually, cars) and communities built inconveniently or unsafe for ambulation. Basically anything that tips the balance of energy in (Calories consumed) to energy out (Calories burned) will add unhealthy pounds to our frame. See if you recognize yourself in any of the following examples:

Fast food. Twenty years ago, a regular order of fries at McDonalds contained 2.4 oz of potatoes and provided 210 Calories. Today, that same order has grown three times in size and adds 400 more Calories. Back then, a regular soda contained 6.5 oz and 85 Calories. Now it's 20 oz and 250 Calories.

I realize that 200 calories may sound small – that's just two innocent and irresistible cookies. Well, if we enjoy those two cookies each day without increasing our

exercise levels, we'll consume an extra 1400 Calories and add $\frac{1}{2}$ a pound of weight every week. At the end of the year, we've added a Whoppering 25 lbs to our waistline! Our bills for medical treatment and larger clothes only compound the heavy feeling that results.

Similarly, for every 30 minutes of vigorous play we miss in a day, we burn 200 fewer Calories. The math continues down the same path of self-destruction. Add 0.5 lbs per week, 25 excess pounds per year. And if you eat the cookies and skip the exercise....

Teens today average a 150 Cal/day energy gap (intake over output) which results in adding 10 pounds per year. This could be avoided by replacing 1 can of soda with water (140 kcal), watching one hour less TV (167 kcal), walking for 1.9 hours instead of sitting, or increasing PE in school from 1-3 times per week (240 kcal). Truth is, it is harder to lose weight than to gain it. A 110 lb child needs to ride a bike for 75 minutes in order to burn off the Calories in one 20 oz soda. Sadly, more children are driven to school in cars and fewer walk, bike, take the bus or use public transit to get there. All of us have seemingly forgotten how to walk or bicycle. While 25% of all trips are

less than one mile, 75% of those short hops are driven by car.

Some communities are actually built with no sidewalks or bike paths. Office stairwells tend to be unpleasant and inconvenient back-traps. The higher our professional pay grade, the more sedentary our work-styles. The poorer our neighborhood, the more distant are fresh food markets. Even our children's hospitals encourage unhealthy eating. 59 of 200 have fast food restaurants inside the hospital. The less we sleep at night the more weight we gain, paradoxically. And why are we staying up so late? Chances are we're watching television or a computer screen. Result – less physical activity when awake and more exposure to ads for fattening food and beverages. Children eat what they watch (so do adults).

Can we hope to reverse this trend and save ourselves from the deadly, bankrupting curse of obesity? There are actually some signs of hope and some ways we can take control of our health. Federal, state and local policies as well as personal behavior can protect you from your next illness. Ironically, transportation and education policies can improve the public health. I've already discussed

sidewalks, bicycle paths and public transit (necessitating walking to and from). Schools that have banned soda and other sweetened beverage machines and prepared healthy meals for students have achieved significant reductions in overweight among students (though, notably, almost always the results find fewer children becoming overweight rather than already overweight students losing weight). States that now require chain restaurants to post calorie counts on menu boards have seen customers make healthier choices. Improving the safety of communities and parks encourages children and adults to use the outdoors for recreation. Still, while regular exercise is important, its main benefit comes from limiting medical problems associated with obesity, not from lowering the incidence of obesity.

Personal behavior change really helps. Breastfed infants are less prone to becoming overweight children. Smaller portions cooked and eaten at home with the whole family taking time to slowly enjoy meals together discourages overeating. And when parents model ways to actively enjoy nature, children develop healthy lifestyles – while learning to cherish and preserve our environmental sources of health. Perhaps the best and easiest habit to

model and teach our children is the 5-2-1-0 rule. 5 or more fruits and vegetables a day; 2 hours or less of total screen time per day; 1 hour or more of physical activity daily; 0 sugared drinks or whole milk. And for emotional and social health, I'd throw in numbers 4 and 3: give four compliments a day to others and take three minutes three times a day to pause, take some deep breaths and think about a person or place you love. Now we have an easy to remember 5-4-3-2-1-0.

All this information convinces me that treating and preventing obesity demands our full attention and effort. And it will take all of us working in concert to promote our children's health. We need caring families, safe, inviting and interesting neighborhoods, and regulatory policies that prevent the endangerment of our children for commercial profit. A Chinese proverb reminds us: "The normal physician treats the problem. The good physician treats the person. The best physician treats the community." Let's do our best.

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