# Facts of Life

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Facing the Obesity Epidemic:
Developing Strategies for Weight Control



**The Issue:**

Obesity has reached epidemic proportions in the United States. Precursors of chronic adult disease are showing up in overweight and obese children, and millions of health care dollars are being spent annually to treat obesity and associated diseases. Studies of successful weight loss and maintenance show more physical activity and education are needed to turn the trend around. But that alone is not enough, experts say. The solution lies in a collaborative effort of the health care industry, government, managed care providers, insurers, educators and parents.

**The Facts:**

- Obesity is the second leading cause of preventable death in the United States, after smoking, resulting in 300,000 excess deaths each year. (2)
- Sixty-one percent of Americans over the age of 20 are overweight, and 27 percent are obese, nearly twice the percentage of adults who were obese in 1980. (18)
- Among younger Americans, about 13 percent of children and adolescents are overweight. This is more than double the number of children and adolescents who were overweight in the early 1970s. (18)
- Although the prevalence of obesity rose across all age groups during the 1990s, the largest increases were seen in 18-29 year-olds (7.1 percent to 12.1 percent), the college educated (10.6 percent to 17.8 percent) and Hispanics (11.6 percent to 20.8 percent). (4)

- Obesity in adults is defined as a body mass index (weight in kilograms divided by the square of height in meters) equal to or greater than 30. A waist circumference greater than 40 inches for men, or 35 inches for women also puts a person in the obese category.(5)

- Obesity is strongly associated with chronic diseases including cardiovascular disease, atherosclerosis, adult-onset diabetes and sleep apnea. (5)

- Obese people who smoke or have hypertension, high levels of low-density lipoprotein cholesterol, low levels of high-density lipoprotein cholesterol or family histories of heart disease have a much higher risk of co-occurring diseases. (5)

- An improved diet, increased physical activity and the weight loss that often accompany such lifestyle changes can reduce the risk of diabetes, especially in adults at high risk for the disease. In some cases, such changes can prevent diabetes from developing altogether. Even modest weight loss reduces diabetes risk. (9)

- The direct costs of obesity and physical inactivity account for approximately 9.4 percent of U.S. health care expenditures. Figures for 1997 estimate total cost at $98 billion. (12,13)

- Fewer than half (42.8 percent) of obese people who had routine checkups last year were advised by their health care professionals to lose weight. (11)

- Thirty-seven percent of Americans believe that weight gain is out of their control, due to such factors as depression, genetics and metabolism. Nineteen percent of doctors cite motivation as the main obstacle for overweight and obese people. (8)

**Interview:**

**Behavior Change Key to Combating Obesity Epidemic**

*William H. Dietz, M.D., Ph.D. is director of the Division of Nutrition and Physical Activity in the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention. Before joining the CDC, he was professor of pediatrics at Tufts University School of Medicine and director of Clinical Nutrition at Boston's Floating Hospital at New England Medical Center. Dr. Dietz's research has established obesity as a true epidemic in 21st Century America.*

Q. **How does the current state of obesity in America meet the definition of an epidemic?**

A. It meets the definition by the numbers of people affected and the rapidity of its spread. Between 1980 and 1994, obesity increased by 50 percent in adults and doubled in children and adolescents. The most rapid increase has been since the 1980s. (18, 21) These are not hard and fast criteria by which to define an epidemic, but I don't think anyone would argue the definition.

Q. **Do people who are obese tend to see their condition more as a cosmetic problem than a health concern?**

A. That is a big hurdle. If people are to change their diet and activity patterns, they need a good reason to do so. If they don't see their weight as a health problem, they're less likely to change their behavior. A recent survey done by Discovery Health revealed that fewer than one third of people knew obesity was related to heart attacks.

(8) That surprised me.

Q. **Is there a misunderstanding about what is considered obesity?**

A. Yes. Many people say, "I'm overweight, not obese. If I was obese, then I'd have a problem." There needs to be more education about what is considered obese - body mass index (weight in kilograms divided by the square of height in meters) equal to or greater than 30 or waist circumference greater than 40 inches for men or 35 inches for women). (10) For example, a woman who is 5'4" and more than 175 pounds or a man who is 6' and more than 225 pounds would be obese.

Q. **What are the causes of obesity? Is it genetic? Lack of physical activity? Overeating?**

A. Yes, yes and yes. Clearly genes affect susceptibility. But single-gene defects are rare. This is an important point. Genes affect susceptibility; they don't cause the disease. The gene pool of our population didn't suddenly start to change 20 years ago. There were environmental changes acting on the same genes that were present all along. Our challenge is to identify what that change is and what caused the sudden changes in obesity.

Q. **What do you think are some of the contributing factors?**

A. There have been lots of changes in our lifestyle; fast food consumption, increased television viewing, increased variety in supermarkets, meal-skipping by adolescent girls, increased soda consumption and increased portion sizes. (16) Communities don't have sidewalks or central shopping areas. Only one-third of children who live within a mile of their school walk there. And 25 percent of all trips of less than a mile are taken by car. (1)

Q. **Are doctors doing enough to help their patients combat obesity?**

A. We know that doctor-patient communication is important. For example, in smoking cessation, when physicians comment on smoking the result is the patient makes an effort to stop. So why don't physicians comment on weight or express concern that the patient should do more to control their weight? (14) That's a complicated problem.

One clear obstacle is that physicians don't have ready remedies to point to. We lack effective strategies to implement in primary care. Another part of the problem is that physicians aren't compensated for overseeing this.

Q. **How can we begin to address obesity problems effectively and reverse the trend so children are less likely to enter the cycle of obesity?**

A. We have to talk about it as a health problem. When it comes to children, there are two successful strategies to prevent obesity. First, parents should take control of the TV set and limit how much TV their children watch. Parents also need to be in charge of what children are offered to eat. Then the kids can either eat it or not.

Q. **How do you persuade a parent that taking control of the TV will help fight obesity?**

A. You don't necessarily. The strategy may be part of an effort to avoid conflicts or how to avoid exposing your children to violence rather than couching it as a strategy to prevent obesity. Whatever angle works.

Q. **So, it doesn't matter how the TV set gets turned off, as long as it does?**

A. Yes. Then the parent needs to be in charge of what food is offered. For example, if a parent comes home and

says, "I'm so tired, I can't fix dinner, what do you want?" - the child, after watching four or five hours of television, will probably opt for fast food. If the parent says, "I don't think we should do that," there's the potential for conflict. The parent shouldn't have asked in the first place.

Q. **What would be a better approach?**

A. "I'm tired, would you like a hamburger or a frozen light meal?" The parent is making the decision. And if the child says he does not want either, it's not up to the parents to offer something else. If the child doesn't eat, he or she will be hungry. You want the child to recognize the consequences of not eating what's served.

Q. **Should children be prodded to eat all the food on their plate?**

A. Absolutely not. Only a child knows when he or she is full. Do not make dessert contingent on what they eat. There should not be a mandatory reward for cleaning the plate. I've never understood why we overfeed our children.

**Weight Loss Registry Measures Long-Term Success**

The National Weight Control Registry was established in 1993 to identify which strategies work for long-term weight maintenance, who is successful and why.

Founded in 1993 as a joint venture between Dr. James Hill of the University of Colorado and Dr. Rena Wing of Brown University, the NWRC maintains a database of more than 3,000 people who have each lost at least 30 pounds and maintained that loss for at least one year. It is the largest such study of its kind. Long-term research on weight loss indicates most patients return to their original, pre-diet weight within three to five years after treatment ends. (15)

"We were constantly being told nobody is ever successful at weight loss. That was the mantra, yet we knew people were successful and we wanted to start identifying and talking to and learning from them," says Wing.

Initial enrollment in the registry included 629 women and 155 men who, despite extensive histories of being overweight, lost an average of 60 pounds and kept it off for an average of six and a half years at entry into the registry. (6)

Although a combination of changes in eating habits and physical activity was at the root of most weight loss, there was not one method to weight reduction, says Wing.

"About half lost the weight on their own, the other half received some type of assistance," says Wing.

The registry group was highly motivated, Wing believes. "Six years later on average, (our subjects) report eating 24 percent of calories from fat, as opposed to an average 34 percent or 35 percent and doing 2,800 calories a week of exercise, the equivalent of walking 28 miles each week. That's even more than recommended for the general public."

But, even though not all involved in weight reduction programs will have the same success, the good news, says Wing, is "It doesn't matter when you start, history doesn't matter, you can be successful." The basic combination that works is increased physical activity and controlled eating.

"The most positive message is that people who have tried and failed to lose weight before can still be successful. The majority of people in the registry report that they had previously tried to lose weight. They are not

qualitatively different from other unsuccessful dieters, but, in the end, they found something that helped them succeed. There is no one way," says Wing.

And, Wing adds, people shouldn't enter a weight loss program worrying that they won't be able to maintain the loss. Data from the registry indicate that 42 percent of the subjects felt it was harder to lose weight than to maintain the weight loss. (6)

The registry continues to seek participants. For more information, call 1-800-606-NWCR (6927).

**Interview #2: : Conquering Obesity: Changing Lifestyles and Social Policies**

*James O. Hill, Ph.D., is a professor of pediatrics and medicine and director of the Center for Human Nutrition and the Colorado Clinical Nutrition Research Unit at the University of Colorado Health Sciences Center in Denver. He is also the co-founder of the National Weight Loss Registry. He served as an adviser to the USDA on the 1995 Dietary Guidelines and as chair of the World Health Organization Consultation on Obesity.*

Q. **Are we approaching the problem of weight loss or weight gain from the wrong perspective?**

A. Absolutely. There are two major things we do wrong. First we approach this as a short-term problem, not as a long-term problem. Typically what we do is promote all of these ways to lose weight, none of which is successful at maintaining the weight loss. What has developed is that there are many, many good ways to lose weight temporarily, but almost no way to lose weight permanently.

The second thing we've done wrong is to concentrate too much on diet and not enough on physical activity.

Q. **What about the surgeon general's recommendations of 30 minutes of physical activity three times a week? Is that sufficient?**

A. It's good, but most people are getting their advice from the popular diet books, and if you look at those, exercise is given token attention. I'm not sure how many people the surgeon general's report touches. Most people who want to lose weight go out to the bookstore and buy a diet book, and most of the attention is on diet.

Q. **Where do we start?**

A. Do what the surgeon general says. Let's get people walking a little bit. One of the things we know is not many Americans do leisure-time planned exercise. We spend our leisure time on things that don't require physical activity: Internet, TV and videos. (19) It would be great if we could get people to devote more time to physical activity.

We have to look for ways to re-engineer physical activity back into our life. Walking meetings are great. You can actually take a 45-minute walk when you're having a meeting. It's pretty easy to do that. I used to sit and read in airports. Airports are a great place to walk. I used to think my travel days were low-activity days, and I've turned it around.

Q. **What about people who are just a few pounds overweight but who are not obese?**

A. Most people who are overweight want to do something about it. But, there are a fair number who say, "I'm only five or 10 pounds overweight and none of this applies to me." But, a little bit of extra activity may prevent them from getting obese or from reaching a point where there really is a problem.

Q. **The number of overweight children and children with diabetes is rising. Do we need to change our focus to children or work more with parents?**

A. That's a tough one. The problem is enormous. We already have a huge problem with adults. If you look at the current generation of kids, it's hard to see that things won't be significantly worse - developing diabetes and heart disease at an even earlier age than their parents.

The future for our kids is very scary unless we do something. All these adult chronic diseases are occurring at younger and younger ages. Who has the responsibility for changing this trend? Do you put it on the parents, on the schools? I think the answer has to be all segments of society need to take it on. We have to figure out a way to do that and we aren't even close. There's a real hole in our ability to deal with childhood obesity and it's probably the most important thing that we should be dealing with.

Q. **What are some of the pieces of the puzzle?**

A. I would start with physical activity, but that may not be the only thing we need to do. Just like adults, kids are spending their leisure time in sedentary activities and they are not getting very much activity in school anymore. (20) We've got to figure out ways to put physical activity back into the lives of our children. The schools are going to have to play a role. The problem is we put a lot of responsibility on the schools, but because kids spend a lot of time in school, it's hard for me to see how we can attack this problem unless the schools participate to some extent.

Q. **What should the government's role be?**

A. I think the government has to be a facilitator, a promoter of health habits.

One of the issues in both prevention and treatment of obesity is nobody gets reimbursed for it. You want health care professionals to deal with obesity but they don't get paid for it. This seems to me a place where the government should have some sort of role, maybe working with managed care to demand that they pay for preventive counseling such as advising obese patients on diet and exercise.

I'm not a big fan of the government coming in and telling people what to do, but on the other hand, I think the government can tell managed care they have to do something. I think there are ways they can help some of these people to share the risk. The problem with managed care is they all say, "If I'm the first one to take it on, I'm going to lose and go bankrupt." There may be a role for the government. It can be a convener and look at solutions. I don't think this is a problem the government can fix. I think they are an important player, but not the only player.

Q. **Why aren't health care professionals paid to treat obesity?**

A. It's an economic issue. People in the insurance industry and managed care are bright, and they know that being obese is contributing to negative health. The problem is evolving our health care system into one that can deal with obesity in such a way that the economics work out for everybody.

For managed care companies, the concern is that taking on obesity could mean they automatically getting higher risk patients and that this becomes a financial disadvantage to the company. We have to sort out those issues before managed care companies will be willing to encourage their member doctors to treat obesity.

Obesity is a disease any way you look at it, and it's getting worse. But if we don't deal with it, the costs to our health care system will be devastating. It's really contributing enormously to health care costs. (11) If you don't

deal with the obesity in the present, you deal with the heart disease and diabetes that result in the future.

Q. **Let's talk about what individuals can do to control their weight. What works best?**

A. We've found no similarities in how people lose weight, but we're finding that for those who maintain their weight, their diets are low-fat and high-carbohydrate. That doesn't mean that's how they lost it, however. The other three common practices among most people who have been able to maintain weight loss are: eating breakfast, monitoring their progress and exercising.(6)

Q. **Why is breakfast the most important meal?**

A. It's probably related to spreading out calories over the course of the day and not getting hungry later on. A lot of people skip breakfast to reduce calories. Our work suggests that would not be a good strategy.

Q. **A lot of conventional wisdom says you shouldn't weigh yourself every day, but you differ. Why is that?**

A. It's monitoring where you are. It's a simple strategy for getting feedback and catching problems before they get worse. If you get on the scale and you've gained two pounds you can do something about it rather than waiting until you've gained 10 pounds and it becomes noticeable even without a scale.

Q. **Physical activity is often recommended as part of a weight loss program. What has your research shown about this component?**

A. That has been an important and consistent key to the success for people in our research.

Q. **What about other choices that people make, such as which neighborhoods to live in? What kind of impact do they have?**

A. We need to get people to focus on these issues. Being able to live in a neighborhood where your kids can walk to school and you can walk to the store is a positive thing. These factors are not always high on people's list of priorities when looking for a home, but maybe it should be.

Q. **What is your current focus at the research center?**

A. Our approach is very much to get people walking more and we are always seeking ways to promote physical activity. We have this epidemic under way and currently no major strategies that have a chance of altering that, and we've got to get some things going. But, even though we may not know all the things we need to know, we cannot wait to attack the problem.

**The Kids Are Not All Right**

Shape Up America!, a national initiative to promote healthy weight and increased physical activity in America, recently conducted surveys to help identify why America's children are becoming part of the obesity epidemic. What they found came as no surprise to President and CEO Barbara J. Moore.

"At the heart of the matter are child care issues," says Moore. "Anybody who's struggled with food issues in children knows how difficult it is. But it's not just a matter of changing individual behaviors, and that's the most ominous new development."

Times have changed, says Moore, "When I was a little girl, we walked, we were positively kinetic. Children came and went and played all the time."

Now, she says, based on Department of Commerce data, there are many parents who have to work one or even two jobs to make ends meet, and more and more kids are coming home to empty houses - which means no supervision over what they eat.

"It's what Sylvia Ann Hewlett and Cornel West describe in their book 'War Against Parents: What We Can Do for America's Beleaguered Moms and Dads,' (Houghton, Mifflin 1998) as 'the parental time famine,'" says Moore. "Although they focus on drugs and crime, the factors are similar for eating and exercise. When parents aren't around, they are powerless to do anything about it."

But lack of parental supervision is only a piece of the puzzle. Communities are equally culpable. "When building communities, no attention is paid to making it possible to ride bikes. Traffic signals are lacking in strategic places, children can't cross roads safely and there are no places to exercise where people feel safe."

In a 10-year prospective study conducted in Sweden, third graders were followed for 10 years to identify factors predisposing them to obesity, says Moore. "Researchers found far and away the most powerful predictor was childhood neglect, indicated by such things as not having done homework, not coming to school clean, or with unmended clothing. That was seven times more powerful a predictor than whether the parents were obese." (17)

Another culprit is the automobile. "Here, the icon that symbolizes the country is the automobile," according to Moore. Public transportation has been done away with, to make way for the car. Historically, the combined efforts of the automotive and rubber industries that have turned automobiles into the main transportation method have contributed to the obesity epidemic, she says.

"I'm not saying the automobile industry had any idea about the public health crisis that would be created, but if you look at Europe, where their culture and society is not committed to the automobile, you'll notice that Europeans are thinner and do more walking," says Moore.

Today, Moore adds, technology has made us more sedentary. "It's managed to reduce the need for small activities such as vacuuming, doing the dishes, cooking and preparing food, mowing the lawn."

But people can change, says Moore. Parents need to be made more aware of the impact of modern conveniences on their children's health and well-being. More emphasis needs to be placed on obesity as an epidemic health crisis, and communities need to provide safe and accessible places for people to incorporate more physical activity into their daily lives.

Moore says people don't have to sacrifice the enjoyment of food to get healthy and stay that way. "Food is a great joy in life and should remain a great joy." The French have found a way to do both, she says.

**The Surgical Alternatives: Overcoming the Psychological Barriers**

For many who have unsuccessfully battled obesity, trying method after method without success, gastric bypass surgery offers another solution.

People who are so overweight it poses an immediate risk to their health may have an even harder time losing weight and keeping it off, says Isaac Greenberg, Ph.D., a clinical psychologist at Beth Israel Deaconess Medical Center in Boston, who counsels patients before and after surgery.

"Gastric bypass is probably the only approach that has a reasonably good chance - two, four, five or six years from now - of resulting in medically significant weight loss, considered at least 10 to 15 percent of initial body weight," says Greenberg. But, there are stigmas attached to the surgery. "People are made to feel shameful if they undergo gastric bypass, that it's the easy way out. The way the world is, thin people think they're thin because they're doing something right and obese people are made to feel they're doing something wrong," he says.

Many who Greenberg counsels are even selective about who they'll tell about the surgery. "The first thing to understand is that these people have run out of options. We, as a society, are very good at blaming the victim, and we have to stop doing that." There are several types of gastric bypass surgery that work by either limiting the amount of food the stomach can hold or by causing less food to be absorbed in the stomach. Patients generally lose two-thirds of their excess weight within two years. And, most obesity-related conditions improve.

One reason for the success rate, says Greenberg, is "the surgery gives people a weapon they've never had before - a slight diminution of their hunger. They're not as obsessed with food. It's amazing, when they say they don't think about food all the time. It's incredibly freeing."

However, no long term results will come, says Greenberg, without accompanying lifestyle changes. "People need to make sure they get enough sleep, take care of themselves, exercise and deal with the psychological changes" that come with weight loss.

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