

CAN FAT

A well-publicized study and a spate of popular books raise questions about the ill effects of being overweight. Their conclusions are probably wrong

By Paul Raeburn

KEY CONCEPTS

- A much discussed 2005 study showed that people at a "healthy" weight have higher mortality than those who are overweight.
- At about the same time, several popular books under the banner of fat but fit—derided the notion that being overweight is necessarily unhealthy.
- This challenge to the prevailing orthodoxy continues to provoke ardent debate. But most nutrition experts still warn about the consequences of carrying extra pounds.
- The health-conscious, nutritionists counsel, should use the body mass index based on height and weight as a gauge to judge proper weight. —The Editors

wo years ago Katherine M. Flegal, a researcher at the Centers for Disease Control and Prevention, did a new statistical analysis of national survey data on obesity and came to a startling conclusion: mildly overweight adults had a lower risk of dying than those at so-called healthy weights,

Decades of research and thousands of studies have suggested precisely the opposite: that being even a little overweight is bad and that being obese is worse. The distinction between overweight and obese—which are sometimes both classified under the rubric of obesity—can be confusing. It relates to the measure called body mass index (BMI), derived by dividing one's weight in kilograms by the square of one's height in meters. A myriad of Internet-based calculators will handle the math for you. The only thing to remember is that a BMI of at least 25 but less than 30 is considered overweight, and one of 30 or more is characterized as obese.

The long-established conventional wisdom holds that Americans carrying excess fat are at increased risk of death from heart disease, diabetes and various kinds of cancer. And those who do not die of obesity-related ailments can possibly look forward to a variety of other un-

pleasant consequences of their weight, including diabetes and its complications, such as the loss of an arm or leg, blindness and kidney failure. That has been the consensus view of most experts for decades, and it has not changed.

Just as Flegal's study appeared, a series of books—by lawyers, journalists, political scientists and other academics outside the medical profession—was published, all challenging conventional wisdom on obesity. Fat, the critics said, was not as bad as we had been led to believe. Furthermore, they said, the research community that condemned obesity had a financial stake in that point of view because of the scientists' complex ties to drugmakers and weight-loss clinics.

The flow of critical books has continued. Earlier this year Barry Glassner, author of the best-selling book *The Culture of Fear* (Basic Books, 2000), published *The Gospel of Food: Everything You Think You Know About Food Is Wrong* (Ecco, 2007). He argues that if we paid more attention to enjoying our food, rather than dieting and counting calories, we would be happier and healthier. It is an appealing argument, but Glassner, a sociologist at the University of Southern California, has not done any research studies to show whether it is true.

The stakes in this debate are high. A major thrust of the nation's disease prevention efforts are aimed at ending what orthodox researchers say is an epidemic of obesity. If being overweight or obese is as harmful as these investigators say, the associated health care costs constitute a substantial drag on the American economy. The CDC estimated in 2004 that obesity's costs in health care and lost productivity amount to \$75 billion annually. Put an end to the fattening of America, these researchers say, and Americans will be healthier, live longer and pay less for their medical care. We might even see gains in American competitiveness, with growth in jobs and wages.

If too much fat is not an important cause of heart disease and other serious illnesses-the possibility raised by Flegal and other criticsthen efforts to trim American waistlines are entirely misplaced. Many of the leaders in the obesity research community dismiss the criticism. "It's complete nonsense, and it's obviously complete nonsense, and it's very easy to explain why some people have gone astray," says Meir Stampfer, a professor of nutrition and epidemiology at the Harvard School of Public Health. Stampfer and his Harvard colleague Walter Willett have done a series of decades-long studies involving hundreds of thousands of people that have laid the foundation for much of what is known about the dangers of being overweight or obese.

Stampfer cites the Flegal study as a prime example of the errors the critics make. The reason being overweight seemed to reduce mortality is because Flegal used the wrong comparison group, he says. The lean group in her study included smokers and people with chronic illnesses—both of whom have increased mortality risks, but not because they are slim. "When you get sick, you lose weight, and you die," Stampfer says. Compared with those who are smokers or chronically ill, people who are overweight come out looking better than they should.

Willett points to a November 2006 study by James A. Greenberg, a researcher at Brooklyn College, to prove his point. Greenberg performed a similar statistical analysis to Flegal's, this time adjusting for factors such as a history of serious illness. When he did, the number of extra deaths for the obese—compared to those with a "healthy" weight—tripled. And he found a significant increased mortality risk in those who were merely overweight, contrary to Flegal's finding that being overweight lowered the risk of death.

Flegal has acknowledged that she did not exclude the chronically ill from her study but argued in a follow-up report that she had done further analyses that showed it would not have made a difference. The disagreement turns on subtle statistical arguments. What is clear, however, is that Flegal's paper is one of a handful that contradict many studies that support the conclusion that being overweight is harmful. Flegal is not necessarily wrong, but the preponderance of evidence clearly points in the other direction.

Willett thinks this assertion is simply the latest recycling of the notion that Americans have been somehow duped about the risks of obesity. "About every 10 years this idea comes along that says it's better to be overweight. And we have to stomp it out," he says. Willett's research has identified profound advantages to keeping weight down—even below the so-called healthy levels.

Many Americans find it difficult to get under a BMI of 25, the border between the overweight and healthy groups. But Willett's work suggests that losing more weight is even better. To take one example, people with a BMI of 20 who gain enough to reach a BMI of 25 have quadrupled their risk of diabetes, Willett says. "If they go up over a BMI of 30, they've increased their risk of diabetes 30- to 60-fold," he says. "And diabetes is not a good thing to have."

So, in light of conflicting evidence, what is the state-of-the-art summary of the conventional wisdom? Willett puts it this way: keep an eye on three numbers. One is your BMI—keep it within the normal range (20 to 24.9), and preferably near the low end of that range. The second is your weight change after age 20. Although obesity has become increasingly common in children, most people who are now adults were probably close to their proper weight when they were 20, he says. Try to get back to that. The third number is waist circumference—if your belt size has increased since you were 20, that is something to reverse, too.

The consequences of working on these three numbers, he says, will be "huge benefits in health." But even small reductions in weight are beneficial. "If people can lose 5 to 10 percent of their weight, they will have done themselves a huge favor. If they can take another step, another 5 to 10 percent, they will have done themselves another favor." Some of the details have changed—but that is the same advice obesity experts have been dispensing for years.

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MORE TO EXPLORE

Guidelines for Healthy Weight. Walter C. Willett et al. in New England Journal of Medicine, Vol. 341, No. 6, pages 427–434; August 5, 1999.

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