Today America is fatter and sicker than ever. And the outlook is grim. According to a 2010 study released by the Organization for Economic Cooperation and Development, 3 of 4 Americans will be obese or overweight by 2020. But this dire prediction doesn’t have to come true. The solution lies in understanding how we got here and making some essential lifestyle changes to reverse this disturbing trend.

The Scope of the Problem
Although we are all well aware of the epidemic of obesity, most of us do not appreciate its extent and its impact in both human and economic terms. One striking illustration of our sorry state is evident when you look at the progression of obesity by state. According to the Centers for Disease Control and Prevention (CDC), in 1990 Colorado was among the thinnest states in the United States, with an obesity rate of <10%. Back then, the fattest states, mainly those in the South, had obesity rates between 10% and 14%. Today, Colorado is the thinnest state in the United States, with an obesity rate between 15% and 19%. This rate would have placed it alone as the fattest state in the union back in 1990. All other states today have obesity rates of ≥20%, and many have obesity rates of >30%. (Figure) This trend shows no sign of abating.

Part of our obesity epidemic is attributable to the expression of a survival mechanism that helped our hunter-gatherer ancestors endure in the wild by encouraging fat accumulation in their bellies during times of feast. It was this belly fat that helped sustain them during the inevitable times of famine. Today this survival mechanism, called insulin resistance, leads to obesity, metabolic syndrome (prediabetes), type 2 (adult-onset) diabetes mellitus, and chronic disease.

Only a few generations ago, obese individuals were few and far between, and their weight problems were primarily attributable to slow metabolisms. Today the cause is rarely from slow metabolism problem; rather, it is attributable to our computer-TV-video game–centric, sedentary, fast-food lifestyle, which has rapidly evolved over the past 30 years. The pattern of lifestyle-induced obesity is different than slow metabolism obesity, and you can observe its frequency at any crowded public venue such as a busy airport. When obesity is caused by our modern lifestyle, fat is stored primarily in the belly, leading to the apple shape, rather than primarily under the skin in the thighs, buttocks, and elsewhere, which results in the pear shape. Importantly, the insulin-resistance, apple pattern of obesity is associated with wide-ranging health risks, not the least of which is heart disease.

If the obesity epidemic is dangerous to our health, then why are deaths from heart disease still decreasing, as reported recently by the CDC? A primary reason is the revolution in the treatment of coronary artery disease. Survival after a heart attack has increased dramatically over the past 50 years, and our ability to identify and treat high blood pressure and high cholesterol in the general population has also remarkably improved. In addition, smoking rates have decreased in the populations at greatest risk.

But a disturbing trend is hidden in these statistics. Today, in adults between 35 and 45 years of age, there is evidence that the rate of heart attacks and the amount of coronary artery...
atherosclerosis is plateauing and even on the increase. Why? Because this generation is really the first to be raised on fast food, video games, TV, and computers. It’s a generation that’s been eating poorly and spending too much time sitting since childhood, and these same men and women are sleep-deprived as well. We can now conclude that today our toxic lifestyle is trumping our advances in medical science. That is why, in this era of debates over optimal systems for delivering health care, if we do not develop effective strategies that promote healthy lifestyles, then whatever health care system we do adopt will be overwhelmed by chronic disease and will ultimately fail. It will also contribute to bankrupting our country because of the excessive cost in trying to treat diseases too late in their natural histories.

The Components of a Healthy Diet

After all this bad news, let me provide some good news. Compared with recent decades that were characterized by great confusion regarding what constitutes healthy eating, today the principles of a healthy diet are largely settled: Consume a variety of healthy carbohydrates, healthy fats, and lean sources of protein and get plenty of fiber (which is easy to do when you’re choosing the right carbohydrates). Experts now agree that we must evaluate the quality of the carbs, fats, and proteins we eat, not just the quantity.

Remember, there is a big difference between good carbohydrates and bad. Healthy carbohydrates are the nutrient-dense, high-fiber carbs found in fruits, vegetables, and whole grains—and the greater the variety in your diet the better. Carbohydrates to be avoided are the highly processed white carbs, such as white flour–containing breads and baked goods, white rice, and white pasta (which have had the majority of the fiber and nutrients removed) and products with lots of added sugars, including high fructose corn syrup.

Similarly, there are good fats, bad fats, and really bad fats. Good fats include antioxidant-rich olive oils and omega-3 oils from fish and some plant sources like flaxseed. Even dark chocolate, although it does have saturated fat, is looking good when consumed in small amounts, thanks to the antioxidants it contains, including heart-healthy catechins and polyphenols. To be avoided are animal sources of high-dose saturated fats along with the really dangerous trans fats (hydrogenated and partially hydrogenated oils) found in commercial baked goods, fried foods, and in some vegetable oils and dressings.

Finally, when it comes to protein, think lean, from both animal and plant sources. An exception is the fatty fish, such as salmon, because their fat is predominantly healthy omega-3. In particular, watch out for grain-fed, hormone-supplemented commercial beef, which can be problematic not only because of excessive amounts of saturated fat but also because of the grain-derived omega-6 fats it contains. Omega-6 fats are essential to our health in moderate amounts, but when consumed in the amounts most Americans do they are proinflammatory.

Dieting Versus Healthy Nutrition

The best strategy for sustaining an ideal weight and good overall health is to apply the principles of optimal nutrition discussed above. Too often, dieting in our culture has been thought of primarily from the calorie-cutting perspective.

Can you lose weight just counting calories without understanding the principles of good nutrition? Over the short term, the answer is yes. You can even lose weight on junk food if you eat very little of it. There’s no question that on any calorie-restricted diet you will lose weight, but you are unlikely to sustain the weight loss, and even if you do, eating primarily nutrient-poor food, even in limited amounts, will certainly not lead to good health. Calories count, but counting calories alone is an unhealthy and an invariably unsuccessful approach to weight loss. By choosing a healthy variety of carbohydrates, fats, and proteins, while getting enough exercise and proper sleep, your body will usually find its optimal weight. So when you think about food and diet, think nutrition, not just calories.

Why Are We Fatter and Hungrier and Sicker?

Just 30 years ago, before the beginning of our epidemic of obesity, Americans had access to plenty of calories, yet most of us were not walking around fat. Today, we are walking around far fatter and hungrier than in the past. What has changed? The answer is too much fast, processed food, too little exercise, and too little sleep.
Highly processed food is absorbed too quickly into our blood streams, inducing abnormal insulin responses that in turn lead to exaggerated swings in blood sugar. This has us walking around hungry, consuming excess calories to combat that hunger, and storing the excess energy in our bellies as fat. That belly fat is linked with inflammatory factors that are associated not only with heart disease but also with many forms of cancer, arthritis, dementia, macular degeneration, and other chronic diseases.

And there’s no question that the digital revolution has Americans expending much less energy at work and often during recreation as well. And little or no exercise means fatter and sicker Americans. In fact, statistics show that approximately 65% of the population routinely sits instead of stands, drives instead of walks, and rides the elevator instead of taking the stairs, which puts those Americans at an increased risk for the same chronic diseases just mentioned.

And now we also know that lack of sleep promotes weight gain because it affects the production hormones that help regulate your hunger levels and your metabolism.

What Is a Healthy Weight?
One problem with our culture is that what is considered attractive is not always healthy and vice versa. Healthy men and women come in all sizes thanks to their genes and other factors. We now know that you can in fact be fat and fit. Such individuals may seem chubby by current American cultural standards, but many have blood chemistries indistinguishable from vegetarian marathoners. And chubby though these people may be, they typically don’t have a lot of belly fat. In contrast are those men and women with normal weight obesity. These individuals may have a normal body mass index (weight corrected for height) but have excess belly fat and the blood chemistries of over-weight diabetics or prediabetics.

So each of us has our own optimal weight associated with healthy blood chemistries. Some of us might attain those blood chemistries by losing just 5 pounds, and others may have to lose 20, 30, or even more. What I tell my patients is that they should be more concerned with their waist circumference and their blood chemistries than with their total weight or body mass index.

Is Yo-Yo Dieting Dangerous?
Some studies have shown that those who yo-yo diet are at higher risk of heart disease than those who just remain overweight. The truth is that people who easily gain and lose weight quickly are more likely to have insulin resistance and metabolic syndrome than those who can’t. When individuals with metabolic syndrome cut their caloric intake, whether on an unhealthy crash diet or a healthy weight loss strategy, they can often quickly end their insulin resistance with its wide swings in blood sugar. They therefore lose their cravings and lose weight easily. As soon as they return to their prior eating habits, their insulin resistance and hunger return and their weight quickly escalates. They yo-yo very easily.

Such patients are the ones with excess belly fat who are at high risk for heart disease and other chronic diseases. In contrast, the fat and fit with primarily slow metabolisms do not have wide swings in blood sugar, do not have excessive cravings, and do not lose or gain weight easily. They are also at much lower risk for heart disease than the insulin-resistant metabolic-syndrome diabetics. Thus, yo-yo dieting is likely an indicator of heart disease risk rather than a cause.

Can Supplements Substitute for Poor Eating Habits?
Patients often ask me this question about supplements, and the answer here is an easy one: No. Many studies over the past 10 years have shown no benefit from consuming supplements, particularly the antioxidant vitamins and more recently daily multivitamin pills.

We now appreciate that there are literally thousands of micronutrients in fruits, vegetables, and even in good fats, which interact in ways that scientists have not been able to replicate in a supplement. And we often hear about a superantioxidant food with magical health benefits. Although some foods do indeed have high levels of antioxidants and may be very healthy, you should not put all your micronutrients in one basket. At this time, the best way to know you are getting enough healthy nutrients is to consume a wide variety of fruits and vegetables in a rainbow of colors. Swallowing a wide variety of supplements is not a substitute.

In Conclusion
Eating fast, convenient, processed foods and logging plenty of sedentary time in front of computer and TV screens is certainly tempting. And it’s these temptations, along with too little sleep, that are making us—and our children—fatter and sicker. So today, more than ever before, it is important that we educate ourselves and our families on the principles of healthy nutrition and other optimal lifestyle habits. With my patients, I have always found that the better they understand the causes of their medical issues and the rationale for their treatment, the better they do. I also believe that for Americans today, the better we understand the real impact our lifestyle choices are having on our health, the better the chance we can alter that grim 2020 prediction, turn things around, and live longer, healthier, and happier lives.

Disclosures
Dr Agatston is the author of The South Beach Diet and companion books.

Reference
Why America Is Fatter and Sicker Than Ever
Arthur Agatston

Circulation. 2012;126:e3-e5
doi: 10.1161/CIRCULATIONAHA.112.098566
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2012 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/126/1/e3

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/