

# F as in Fat:

## HOW OBESITY THREATENS AMERICA'S FUTURE

# 2012



### TWO FUTURES FOR AMERICA'S HEALTH

The future health of the United States is at a crossroads. If obesity rates continue to grow at current rates over the next two decades, the health and economic cost to our nation would be staggering. On the other hand, a national commitment to obesity prevention that reduces the average body mass index (BMI) for Americans by just 5 percent would sharply lower obesity-related diseases and health care costs, which could result in tens of billions of dollars saved. For the first time, the annual report from the Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF) includes an analysis that forecasts the impact of both scenarios in the year 2030. The analysis, which was commissioned by RWJF and TFAH, was conducted by the National Heart Forum and based on a peer-reviewed model published last year in *The Lancet*.<sup>1</sup>

This executive summary provides an overview of the report's major findings on projected state obesity rates, new disease cases and health care costs in 2030. The summary also provides policy recommendations—based on the full report's comprehensive analysis—on how to address the obesity epidemic in the United States.

The full report with state rankings in all categories is available on TFAH's website at [www.healthyamericans.org](http://www.healthyamericans.org) and RWJF's website at [www.rwjf.org](http://www.rwjf.org). TFAH and RWJF collaborated on the report, which was supported by a grant from RWJF.

## MAJOR FINDINGS

### OBESITY RATES

#### Current Data

According to the latest data from the U.S. Centers for Disease Control and Prevention (CDC), obesity rates in 2011 ranged from a high of 34.9 percent in Mississippi to a low of 20.7 percent in Colorado. Thirty-nine states have an obesity rate of at least 25 percent.

#### 2030 Scenario #1 – Obesity rates continue on their current track

More than 60 percent of adults in America would be obese in 13 states; more than half of adults would be obese in 39 states; and more than 44 percent would be obese in all 50 states. Mississippi would have the highest obesity rate at 66.7 percent, while Colorado would have the lowest rate for any state at 44.8 percent.

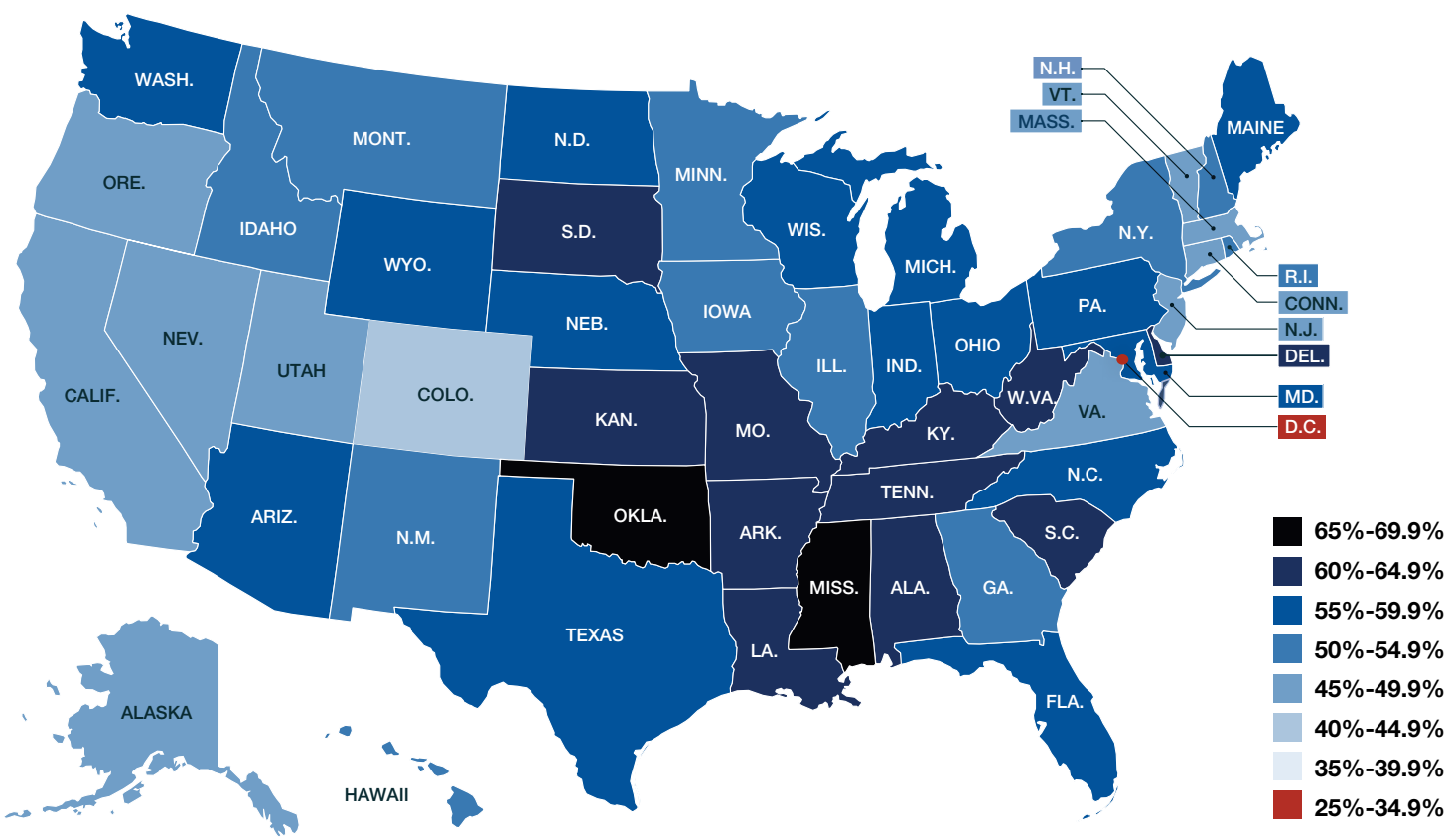
#### 2030 Scenario #2 – Average BMI reduced by 5 percent

Obesity rates would still rise, but by significantly less than current projections. No state would have an obesity rate above 60 percent; Mississippi would have the highest rate at 59.9 percent. More than half of Americans would be obese in 24 states, compared with 39 states in the first scenario. Two states would have rates under 40 percent (Alaska at 39.4 percent and Colorado at 39 percent).

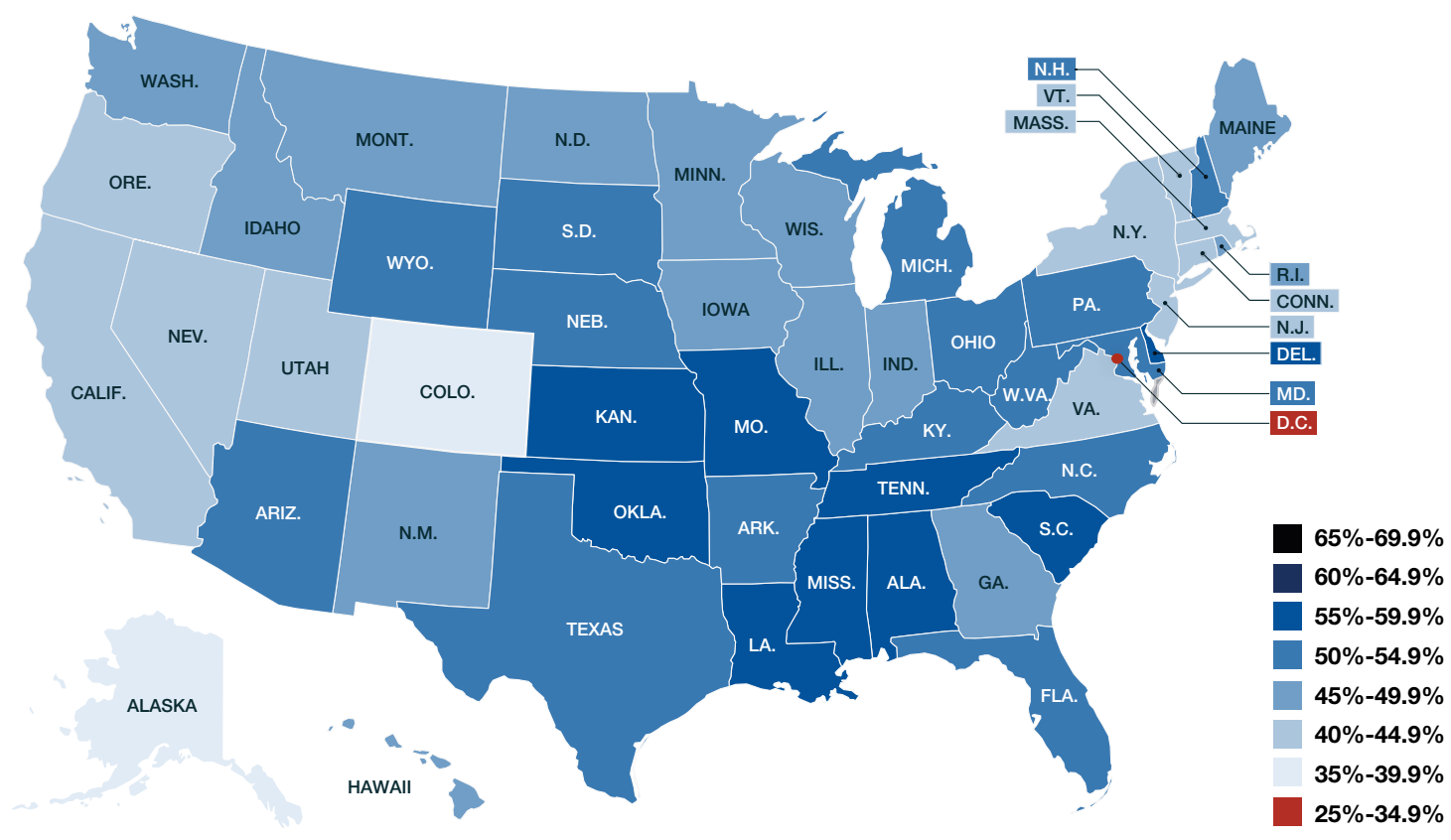
#### Background on Body Mass Index and the Modeling Study

Currently, more than 35 percent of adults are obese.<sup>2</sup> Obesity is defined as an excessively high amount of body fat or adipose tissue in relation to lean tissue. An adult is considered obese if his or her body mass index (BMI) is 30 or higher. The new modeling study in this year's report projects what obesity rates and the consequences for disease rates and health care costs could be if average BMI in each state continued to grow on the current trajectory over the next 20 years. The study also forecasts what would happen if average BMI in each state was reduced by 5 percent, which could translate to a 9 percent to 14 percent reduction in the states' obesity rates by 2030, depending on the state. For example, on an individual level, reducing the BMI of an average adult by 1 percent would be equivalent to a weight loss of approximately 2.2 pounds.<sup>3</sup> According to the CDC, the average American male over age 20 weighs 194.7 pounds, and the average American woman over age 20 weighs 164.7 pounds.<sup>4</sup>

### 2030: ADULT OBESITY RATES IF THE CURRENT TRAJECTORY CONTINUES



### 2030: ADULT OBESITY RATES IF AVERAGE BMI IS REDUCED BY 5 PERCENT



## DISEASE RATES

### Current data

The analysis examined the potential growth of five of the highest-cost and highest-incidence health problems related to obesity: type 2 diabetes, coronary heart disease and stroke, hypertension, arthritis and obesity-related cancers. Currently, more than 25 million Americans have type 2 diabetes, 27 million have chronic heart disease, 68 million have hypertension and 50 million have arthritis. In addition, 795,000 Americans suffer a stroke each year, and approximately one in three deaths from cancer per year (approximately 190,650) are related to obesity, poor nutrition or physical inactivity.

### 2030 Scenario #1 – Obesity rates continue on their current track

The number of new cases of type 2 diabetes, coronary heart disease and stroke, hypertension and arthritis could increase 10 times between 2010 and 2020—and double again by 2030. Obesity could contribute to more than 6 million new cases of type 2 diabetes, 5 million new cases of coronary heart disease and stroke, and more than 400,000 new cases of cancer in the next two decades.

### FIVE TOP OBESITY-RELATED DISEASES & 10 STATES WITH HIGHEST RATE OF NEW CASES (PER 100,000)

Rank	Diabetes	State	Cancer	State	CHD & Stroke	State	Hypertension	State	Arthritis	State
1	15,208	W. Va.	4,897	Maine	35,519	W. Va.	30,508	Maine	18,725	La.
2	14,673	Tenn.	4,796	W. Va.	34,833	Maine	30,092	W. Va.	18,720	W. Va.
3	14,507	Maine	4,569	Fla.	32,471	Fla.	28,959	N.H.	18,146	N.H.
4	14,032	Mo.	4,430	Vt.	31,110	Pa.	27,823	Vt.	17,608	Vt.
5	13,997	Mich.	4,363	N.H.	30,933	N.H.	27,611	Fla.	17,497	R.I.
6	13,945	Miss.	4,340	Pa.	30,542	Mont.	27,338	Pa.	17,449	Tenn.
7	13,851	Ohio	4,287	Mont.	30,429	Vt.	27,080	Mont.	17,376	PA.
8	13,850	N.H.	4,217	Del.	30,376	Ala.	27,039	Del.	17,249	Mich.
9	13,777	Ala.	4,169	Ala.	29,236	Del.	26,909	Ky.	17,138	Fla.
10	13,569	Ky.	4,149	R.I.	29,625	Tenn.	26,782	Ala.	17,132	Ky.

### 2030 Scenario #2 – Average BMI reduced by 5 percent

The number of Americans who could be spared from developing major obesity-related diseases could range from:

**Type 2 diabetes:** 14,389 in Alaska to 796,430 in California;

**Coronary heart disease and stroke:** 11,889 in Alaska to 656,970 in California;

**Hypertension:** 10,826 in Alaska to 698,431 in California;

**Arthritis:** 6,858 in Wyoming to 387,850 in California; and

**Obesity-related cancer:** 809 in Alaska to 52,769 in California.

## HEALTH CARE COSTS

### Current data

Estimates for the medical cost of adult obesity in the United States range from \$147 billion to nearly \$210 billion per year. Of those amounts, Medicare and Medicaid are responsible for \$61.8 billion. Childhood obesity alone is responsible for \$14.1 billion in direct costs, including total costs for children and youth with obesity-related hospitalizations, which increased from \$125.9 million in 2001 to \$237.6 million measured in 2005 dollars.

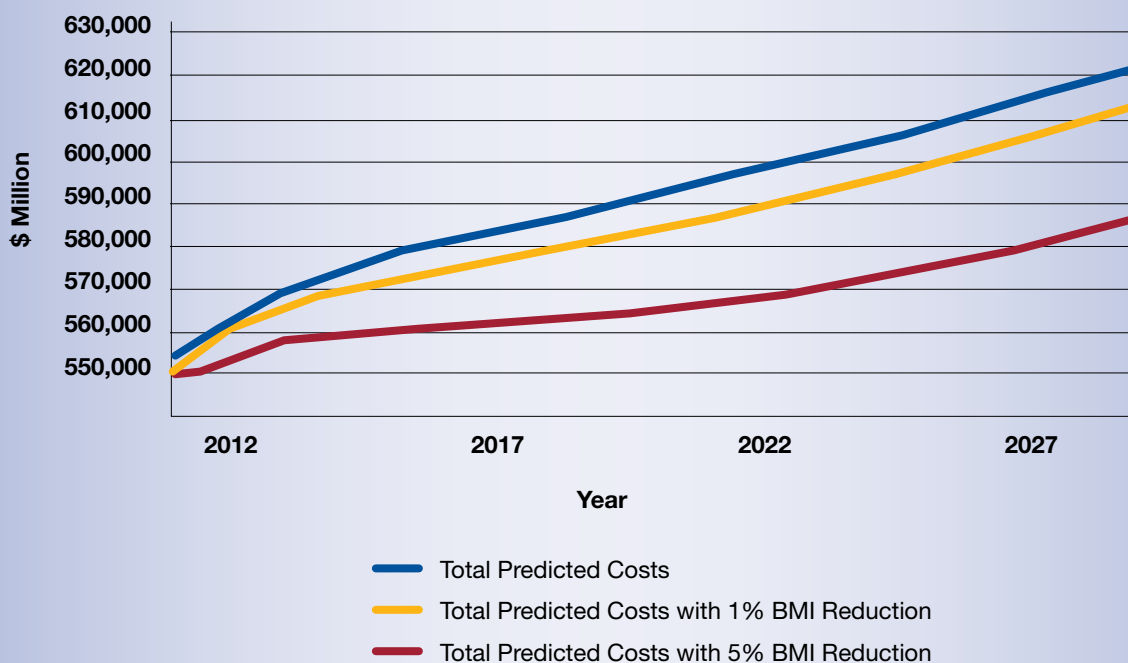
### 2030 Scenario #1 – Obesity rates continue on their current track

Combined medical costs associated with treating preventable obesity-related diseases are estimated to increase by up to \$66 billion per year in the United States, and the loss in economic productivity could be as high as \$580 billion annually.

### 2030 Scenario #2 – Average BMI reduced by 5 percent

Obesity-related health care costs around the country could be significantly reduced. Nearly every state could save between 6.5 percent and 7.9 percent in health care costs. By 2030, this could equate to savings ranging from \$81.7 billion in California to \$1.1 billion in Wyoming.

**PROJECTIONS FOR ANNUAL OBESITY-RELATED DIRECT HEALTH SPENDING IN THE UNITED STATES, 2010-2030**



## POTENTIAL INCREASES AND SAVINGS IN OBESITY RELATED HEALTH CARE COSTS BY 2030

State	Percentage of Potential Increase in Obesity-Related Health Care Costs by 2030 on Current Course	Potential Savings by 2030 if State Reduced Average BMI by 5% (cumulative)	Percentage of Potential Savings by 2030 if State Reduced Average BMI by 5%
Alabama	12	\$9,481,000,000	7.1
Alaska	25.7	\$1,530,000,000	6.5
Arizona	11.1	\$13,642,000,000	7.5
Arkansas	9.6	\$6,054,000,000	7.6
California	15.7	\$81,702,000,000	7.6
Colorado	28.5	\$10,794,000,000	7.1
Connecticut	15.7	\$7,370,000,000	7
Delaware	14	\$1,912,000,000	7.3
DC	18.8	\$1,026,000,000	6.7
Florida	3.3	\$34,436,000,000	2.1
Georgia	24.3	\$22,743,000,000	7.7
Hawaii	12.3	\$2,704,000,000	7.1
Idaho	12	\$3,280,000,000	7.3
Illinois	16.1	\$28,185,000,000	7.5
Indiana	13	\$13,400,000,000	7.1
Iowa	3.7	\$5,702,000,000	7.1
Kansas	11.2	\$5,979,000,000	7.7
Kentucky	17.6	\$9,437,000,000	7.3
Louisiana	12.8	\$9,839,000,000	7.3
Maine	19	\$2,870,000,000	7.1
Maryland	21.3	\$13,836,000,000	7.6
Massachusetts	19.1	\$14,055,000,000	7.2
Michigan	19	\$24,187,000,000	7.7
Minnesota	15.7	\$11,630,000,000	7.3
Mississippi	11.7	\$6,120,000,000	6.9
Missouri	13.9	\$13,368,000,000	7.9
Montana	13	\$1,939,000,000	6.9
Nebraska	6.7	\$3,686,000,000	7.5
Nevada	18.2	\$5,921,000,000	7.3
New Hampshire	28.7	\$3,257,000,000	7.1
New Jersey	34.5	\$1,391,000,000	7.4
New Mexico	11.8	\$4,095,000,000	7.3
New York	14.8	\$40,017,000,000	7.2
North Carolina	17.6	\$21,101,000,000	7.5
North Dakota	1.9	\$1,177,000,000	7.2
Ohio	15.2	\$26,328,000,000	7.6
Oklahoma	10.8	\$7,444,000,000	7.2
Oregon	17.3	\$7,938,000,000	7.3
Pennsylvania	9.1	\$24,498,000,000	7.1
Rhode Island	19.9	\$2,478,000,000	7.6
South Carolina	12.6	\$9,309,000,000	7.4
South Dakota	3.6	\$1,553,000,000	7.6
Tennessee	17.8	\$13,827,000,000	7.6
Texas	17.1	\$54,194,000,000	7.7
Utah	13.7	\$5,843,000,000	7.8
Vermont	20.3	\$1,376,000,000	7.3
Virginia	23.8	\$18,114,000,000	7.4
Washington	21.6	\$14,729,000,000	7.4
West Virginia	12	\$3,638,000,000	6.8
Wisconsin	14.7	\$11,962,000,000	7.4
Wyoming	15.6	\$1,088,000,000	7.3

## MAIN RECOMMENDATIONS

This year's *F as in Fat* report paints a stark contrast between two futures for America's health. The potential rise in obesity-related diseases and health care costs by 2030 is stunning. But the study also shows that, in each state, thousands or millions of cases of diseases could be prevented and billions of dollars could be saved if we continue to pursue policies at all levels of government that preserve health, prevent disease and reduce health care costs.

On the basis of the data collected and a comprehensive analysis, TFAH and RWJF support a series of policy recommendations to address the obesity crisis in America:

### **Fully implement the Healthy, Hunger-Free Kids Act by implementing the new school meal standards and updating nutrition standards for snack foods and beverages in schools**

TFAH and RWJF recommend USDA issue a draft rule for competitive foods that would align standards with the most current Dietary Guidelines for Americans and be based on recommendations from the Institute of Medicine. The proposed rule should be released as soon as possible so the public can weigh in, standards can be finalized and implementation can begin in schools across the country.

### **Protect the Prevention and Public Health Fund**

Given the importance of the Prevention and Public Health Fund (PPHF) and its potential to transform the public health landscape, TFAH and RWJF recommend that the PPHF be preserved in full, and that it not be used to offset or justify cuts to other programs.

### **Increase investments in effective, evidence-based obesity-prevention programs**

TFAH and RWJF recommend increased funding for Community Transformation Grants and similar evidenced-based programs, provided that the increase is not the result of a cut to another PPHF funding stream.

### **Fully implement the National Prevention Strategy and Action Plan**

TFAH and RWJF recommend continued implementation of the National Prevention Strategy across all of the 17 participating federal agencies.

### **Finalize the Interagency Working Group on Food Marketed to Children Guidelines**

TFAH and RWJF recommend that the Interagency Working Group on Food Marketed to Children finalize and release strong, voluntary guidelines for food marketed to children. In the interim, food and beverage companies should work together with scientific, public health and consumer groups to strengthen industry standards on their own.

## Expand opportunities to promote physical education and physical activity in schools

TFAH and RWJF urge Congress to make physical education and physical activity a priority as it reauthorizes the Elementary and Secondary Education Act by including provisions of the FIT Kids Act, expanding funding for the Carol M. White Physical Education program that supports physical activity in schools, and giving schools the option of using Title I and Title II funding to support physical education.

## Fully support healthy nutrition in federal food programs

At a minimum, current SNAP eligibility, benefit levels, and program integrity should be maintained to ensure that low-income Americans have the resources necessary to afford a nutritious diet and prevent hunger. Additionally, TFAH and RWJF support the inclusion of the Healthy Food Financing Initiative in the final Farm Bill.

## Encourage full use of preventive services and connect clinical care with obesity-prevention outside of the doctor's office

Per recommendations of the U.S. Preventive Services Taskforce, TFAH and RWJF recommend the Centers for Medicare and Medicaid Services (CMS) promote increased use of cost effective, community-based prevention, health education and counseling for Medicare and Medicaid beneficiaries.

## Acknowledgments

**Trust for America's Health** is a non-profit, non-partisan organization dedicated to saving lives by protecting the health of every community and working to make disease prevention a national priority.

[www.healthyamericans.org](http://www.healthyamericans.org)

The **Robert Wood Johnson Foundation** focuses on the pressing health and health care issues facing our country. As the nation's largest philanthropy devoted exclusively to improving the health and health care of all Americans, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful and timely change. For 40 years the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime.

For more information, visit [www.rwjf.org](http://www.rwjf.org). Follow the Foundation on Twitter [www.rwjf.org/twitter](http://www.rwjf.org/twitter) or Facebook [www.rwjf.org/facebook](http://www.rwjf.org/facebook).

## Endnotes

- 1 Wang YC et al. Health and Economic Burden of the Projected Obesity Trends in the USA and the UK. *The Lancet*, 378, 2011.
- 2 Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of Obesity in the United States, 2009-2010. NCHS data brief, no 82. Hyattsville, MD: National Center for Health Statistics, 2012.
- 3 "Obesity and Cancer Risk." National Cancer Institute. [www.cancer.gov/cancertopics/factsheet/Risk/obesity](http://www.cancer.gov/cancertopics/factsheet/Risk/obesity) (accessed June 12, 2012).
- 4 "Body Measurements." U.S. Centers for Disease Control and Prevention. [www.cdc.gov/nchs/fastats/bodymeas.htm](http://www.cdc.gov/nchs/fastats/bodymeas.htm) (accessed August 2012).