

AN ONLINE NEWSLETTER FOR HEALTH PROFESSIONALS

# Making Healthy Choices



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## Medical Cost of Obesity May Be as High as \$147 Billion Annually

The health cost of obesity in the United States is as high as \$147 billion annually, according to a recent study by the Centers for Disease Control and Prevention (CDC) and RTI International, one of the world's leading research groups.

The proportion of all annual medical costs that are due to obesity increased from 6.5% in 1998 to 9.1% in 2006, the study said. This total includes payment by Medicare, Medicaid, and private insurers, and includes prescription drug spending. Overall, persons who are obese spent \$1,429 (42%) more for medical care in 2006 than did normal weight people. These estimates were compiled using national data that compare medical expenses for normal weight and obese persons.

Recognizing the large health and economic burden of obesity, CDC has issued its first comprehensive set of evidence-based recommendations to help communities tackle the problem of obesity through programs and policies that promote healthy eating and physical activity.

The strategies promote the availability of affordable healthy food and beverages, support healthy food and beverage choices, encourage breastfeeding, encourage physical activity or limit sedentary activity, support safe communities that support physical activity, and encourage communities to organize for change.

"It is critical that we take effective steps to contain and reduce the enormous burden of obesity on our nation", said CDC Director Thomas Frieden, MD, MPH. "These new recommendations and their proposed measurements are a powerful and practical tool to help state and local governments, school districts, and local partners take necessary action."

CDC partnered with the International City/County Management Association to pilot test an initial set of obesity prevention measures in 20 communities. The resulting 24 recommended strategies and suggested measures are now being pilot tested by Minnesota and Massachusetts state health departments in order to determine their success. The strategies include:

- Communities should support locating schools within easy walking distance of residential areas.
- Communities should improve availability of affordable healthier food and beverage choices

The report, "Recommended Community Strategies and Measurements to Prevent Obesity in the United States," along with a companion implementation guide, appears in CDC's MMWR Recommendations and Reports, available at [www.cdc.gov/MMWR](http://www.cdc.gov/MMWR). To view the economic paper published in Health Affairs, visit: [www.healthaffairs.org](http://www.healthaffairs.org).

**Reference:** Centers for Disease Control and Prevention [news release]. July 27, 2009.



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### Website Helps Employers Combat Obesity and Reduce Health-Related Costs

The Centers for Disease Control and Prevention (CDC) recently launched *LEANWorks!*, a website designed to help businesses address obesity. LEAN stands for Leading Employees to Activity and Nutrition.

“CDC *LEANWorks!* was developed in direct response to organizations asking CDC for help in addressing the obesity epidemic. Specifically they wanted to know what interventions were effective in helping employees maintain a healthy weight,” said William Dietz, MD, PhD, director of CDC’s Division of Nutrition, Physical Activity, and Obesity. “CDC has identified science-based interventions that work to prevent and control obesity. CDC *LEANWorks!* provides the tools that employers need to take action.”

The free website was developed particularly for small and mid-size companies, which typically have more limited resources to devote to obesity prevention efforts. However, the tools and resources available on CDC *LEANWorks!* can benefit companies of any size.

CDC *LEANWorks!* can help employers calculate the cost of obesity for their organizations and develop tailored approaches to help control these costs through interventions such as fitness classes, lunchtime health education sessions, weight management programs, and more.

The website provides a variety of resources to employers including:

- An [obesity cost-calculator](#) where employers can input employee demographic data to estimate the total costs associated with obesity and determine annual obesity-related medical costs for their companies.
- Information and resources to help employers [plan](#), [build](#), [promote](#), and [assess](#) interventions to combat obesity.
- Information on how employers can estimate return on investment, a measure of the cost of an intervention compared to the expected financial return of the intervention.

Obesity is a risk factor for high blood pressure, type 2 diabetes, stroke, and heart disease. Obese individuals spend 77% more money for necessary medications than non-obese persons.

“Obesity affects more than just healthcare costs. It also has a significant impact on worker productivity because the more chronic diseases employees have, the more likely they are to be absent from work, or less productive if they come to work sick,” said Janet Collins, PhD, director of CDC’s National Center for Chronic Disease Prevention and Health Promotion.

Because organizations do not usually publish information about their worksite programs in the scientific literature, CDC visited select businesses to identify promising worksite obesity prevention and control practices. The CDC *LEANWorks!* website provides case studies from some of those businesses to provide examples of successful worksite obesity prevention programs.

“Workplace obesity prevention programs can be an effective way for employers to reduce obesity and lower their healthcare costs, lower absenteeism and increase employee productivity,” said Dr. Dietz. “Employers may also see other indirect benefits when they implement these programs such as improved employee morale, increased worker retention, and improved recruitment of new employees.”

To learn more about CDC *LEANWorks!* visit [www.cdc.gov/leanworks](http://www.cdc.gov/leanworks).

**Reference:** Centers for Disease Control and Prevention [news release]. June 25, 2009



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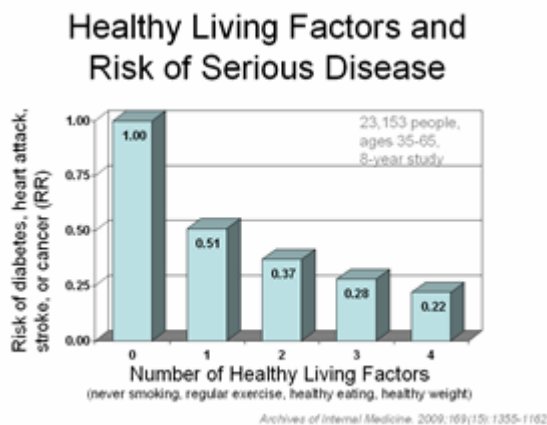
### Healthy Living Is the Best Answer

With lots of debate on how to reduce the high cost of healthcare in the United States, a new study dramatically reveals that the best answer is healthy living.

Researchers at the Centers for Disease Control and Prevention along with other health institutions studied key healthy behaviors in a large population of 23,153 people aged 45-65. All people were free of chronic disease and in good health at the start of the study. After 8 years of follow-up, researchers looked for new cases of serious disease that developed, such as diabetes, heart attack, cancer, or stroke. They found four lifestyle factors that were strong predictors for developing chronic disease. They are:

- Never smoking
- Avoiding excess body weight (BMI less than 30)
- Getting regular physical activity – at least 3.5 hours per week (30 min/day)
- Eating healthier meals – a high intake of whole grains, fruits, and vegetables, and low consumption of red meat.

After adjusting for age, educational level, occupation, etc., participants who had all four of the healthy living factors, compared to those with none, decreased their risk of developing any of the serious chronic diseases by 78%. In other words, those living healthfully were only one-fifth as likely to develop diabetes or cancer or experience a heart attack or stroke compared to those with the unhealthy lifestyle.



[View complete slide presentation.](#)

Looking at specific diseases, the four healthy lifestyle factors (compared to those not following them) reduced the risk of getting diabetes by 93% and heart attacks by 81%. Strokes were cut in half and the risk of getting cancer was cut by 36%. Think what impact this would have on the healthcare expenses in the United States if everyone chose the healthy living option.

Even if following only two of the healthy factors (compared to those who followed none), study participants still had remarkable reductions in the likelihood of developing a serious disease. For example, if participants who exercised regularly and ate healthy meals cut the risk of a serious illness by two-thirds (66%). Those who avoided excess body weight and exercised regularly reduced their risk of serious disease by 64%.

Clearly a healthy lifestyle has a major impact on whether you will experience a serious and expensive illness in your life or not. One major part of the “healthcare debate” should be focusing on a healthcare system that helps people live more healthfully, and that promotes prevention. The economic impact could be phenomenal.

**The bottom line.** For yourself, you can choose to live healthfully each day. If you want to significantly reduce your risk of cancer, a heart attack or stroke, and diabetes, this study showed that you should:

- Avoid smoking
- Keep your weight in a healthy range, at least avoiding obesity.
- Get regular physical activity such as brisk walking, at least 30 minutes daily.
- Choose healthier meals by eating primarily whole-grain breads and cereals, eating more fruits and vegetables (aim for 4-5 cups daily), and eating less red meat and other foods high in saturated fats.

**Reference:** Ford ES, et al. Healthy Living Is the Best Revenge. Archives of Internal Medicine. 2009;169(15):1355-1362

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### Americans Consume Too Much Salt

Most Americans consume more than double the amount of their daily recommended level of sodium. A new study by the Centers for Disease Control and Prevention (CDC) shows that more than two out of three adults are in population groups that should consume no more than 1,500 milligrams (mg) per day of sodium. During 2005-2006 the estimated average intake of sodium for persons in the United States age 2 years and older was 3,436 mg per day.

A diet high in sodium increases the risk of having higher blood pressure, a major cause for heart disease and stroke. These diseases are the first and third leading causes of death in the United States.

"It's important for people to eat less salt. People who adopt a heart healthy eating pattern that includes a diet low in sodium and rich in potassium and calcium can improve their blood pressure," said Darwin R. Labarthe, MD, PhD, director of the CDC's Division for Heart Disease and Stroke Prevention.

Most of the sodium we eat comes from packaged, processed, and restaurant foods. CDC along with other Health and Human Services agencies, including the U.S. Food and Drug Administration, will be working with major food manufacturers and chain restaurants to reduce sodium levels in the food supply.

The study in CDC's Morbidity and Mortality Weekly Report used data from the National Health and Nutrition Examination Survey, and is the first study to use national data to show that 69.2% of the adult population belongs to a specific group that should aim to consume no more than 1,500 mg of sodium per day. This group includes persons with high blood pressure, blacks, or middle-aged and older adults (more than 40 years old).

Choosing foods like fresh fruits and vegetables, when dining out, asking that foods be prepared without added salt, and reading the nutrition label of foods before purchasing can improve health for all adults.

**Reference:** Centers for Disease Control and Prevention [news release]. March 26, 2009.

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### What's the Best Diet for Lowering Weight and LDL Cholesterol?

The high protein diet, such as the Atkin's diet, has been a popular weight loss diet in recent years. A high-protein diet has created concern, however, because it is high in meat, animal products, and saturated fat. Numerous studies have shown that a high meat intake is associated with increased risk for heart disease, cancer of the digestive tract, overall mortality, and acceleration of chronic kidney disease, kidney stones, and osteoporosis.<sup>1</sup>

A new study decided to look at a high-protein (31% of calories), low-carbohydrate diet that used plant proteins instead of animal products to see if it was a healthier approach to weight loss. The high-protein diet was vegetarian. The primary sources of protein came from gluten foods, soy (soy burgers, tofu, and soymilk), nuts, some high-fiber whole grains, fruit, and high-fiber vegetables. Fats in the diet came primarily from nuts, vegetable oils, avocado, and soy products.

The control diet was also vegetarian (ovo-lacto) but higher in carbohydrates (58% of calories), lower in protein (16% of calories), and moderate in fat (25% of calories). It used low-fat or fat-free dairy, cholesterol-free eggs, and more grains, fruits, and vegetables.

#### Summary Findings

Health Changes	Low-Carbohydrate/High Protein Vegetarian Diet	High-Carbohydrate
Weight Loss	9.9 lbs	9.5 lbs

LDL cholesterol (%)	-20.4%	-12.3%
Triglyceride Levels	-76 mg/dL	-40 mg/dL

Both groups reduced their calorie intake by 40% and lost 10 pounds in four weeks. There was no difference in weight loss between the two groups pointing out that calorie intake is more important than protein or carbohydrate intake. Both diets lowered LDL cholesterol levels, but the diet high in plant proteins lowered LDL cholesterol levels the best (20.4% compared to 12.3% on the high carbohydrate vegetarian diet). Blood pressure levels also were reduced more favorably in the low-carbohydrate/high-protein diet.

#### What does this study tell us?

1. To lose weight, eat fewer calories. (It's calories that are most important.)
2. If you want to follow a low-carbohydrate/high-protein eating plan, be sure most of the protein comes from plant foods (tofu, soymilk, soy burgers, gluten, nuts, and high-fiber whole grains) rather than animal products for best results in lowering LDL cholesterol, triglycerides, and coronary risk.
3. Choose healthy fats (nuts, avocado, and vegetable oils). Eating healthy fats (avocado, nuts, and vegetable oils) are good for the heart as long as you eat them in moderate amounts that allow for good weight control.
4. Both low-calorie diet plans were good for losing weight. A high-protein/low-carbohydrate vegetarian eating plan showed better LDL cholesterol and triglyceride improvement than the high-carbohydrate vegetarian diet.

#### References:

1. Tuttle K and Milton J. The "Eco-Atkins" Diet. Archives of Internal Medicine. 2009; 169(11):1027.
2. Jenkins D, et al. The effect of a plant based low carbohydrate diet on body weight and blood lipids. Archives of Internal Medicine. 2009;169(11):1046-1054

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#### Depression

Over the course of a lifetime, one in five women and one in nine men will have depression symptoms. Typical symptoms include feelings of hopelessness, loss of interest in things they once enjoyed, withdrawal from social activity, changes in eating and/or sleeping patterns, and suicidal thoughts. If you have these symptoms, get medical help. Depression is treatable.

These symptoms are thought to occur due to actual physical changes that occur in the brain including shrinking of the part of the brain that is key to memory (the hippocampus) and concentration. Depression also appears to trigger the output of a stress hormone (*cortisol*) that can damage the pathways connecting neurons. These changes are thought to occur largely due to our faulty thinking (and excessive stress or loss). It is also thought that by adjusting our thoughts through talk therapy (using cognitive therapy and problem solving therapy) the brains begin to function better and people feel better again.

Depression is also treatable with certain medications (antidepressants) that help repair neuron pathways to help people feel better again. A combination of talk therapy and medication is usually more effective than one treatment alone.

Other important therapeutic options (and good preventive actions) include a healthy lifestyle:

- **Nutritious meals** – low in refined foods, high in unrefined foods; healthy fats such as omega-3 fats (found in fish oils and flax meal); and highly colored fruits and vegetables that are high in naturally occurring antioxidants and photochemicals that help promote brain health (such as berries, citrus, and spinach).
- **Regular exercise** – brisk walking 30+ minutes daily.
- **Mentally stimulating activities** – reading, problem solving, playing a musical instrument, and other activities requiring mental concentration.
- **An active social life** – interacting with friends, dancing, playing games, and staying engaged with people.

These are all positive actions you can take daily to keep the brain healthy and working well to help prevent depression and early mental dementia.

**Source:** Duke Medicine. HealthNews, June 2009

**Links:**

Take the [Depression Self Test](#) to see if you or a friend is suffering from depression.

Take the [Stress Self Test](#) to see if you are overwhelmed with stress in your life.

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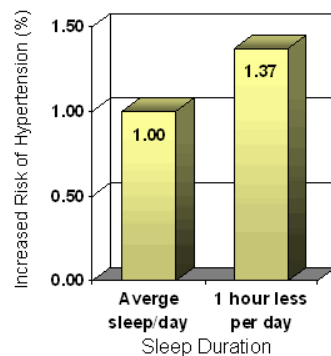
### Lack of Sleep Raises Blood Pressure

More than 7 million deaths occur each year worldwide due to high blood pressure. In the United States, one out of every three adults has high blood pressure. New research indicates that lack of adequate sleep could be contributing to this major health problem world wide.

In a recent study, researchers identified 578 young adults who all had good blood pressure levels. Then they followed these people for 5 years, tracking how much sleep they got regularly. They found that for each hour of reduction in sleep duration the risk of developing high blood pressure increased by 37% in both men and women. Most studies find that people who get at least 7-8 hours of sleep daily have the best health and lowest mortality levels.

### Sleep Duration and Blood Pressure

- Short sleep duration is linked to increased risk of high blood pressure
- Each hour of reduction in sleep was associated with a 37% increased risk of developing high blood pressure



Archives of Internal Medicine. 2009;169(11):1055-1061.

In another larger study (NHANES I) people who got 5 hours of sleep daily, compared to the recommended 7-8 hours daily, were 60% more likely to develop high blood pressure over the 8-10 years of follow-up.

Both of these large studies support the concept that short sleep duration is linked with higher blood pressure. If you want to keep your blood pressure in a healthy range (less than 120/80 for best health), be sure to get adequate rest daily. Aim for at least 7-8 hours of sleep daily. Taking a midday knap can also be helpful in reaching your 7-8 hours.

**References:**

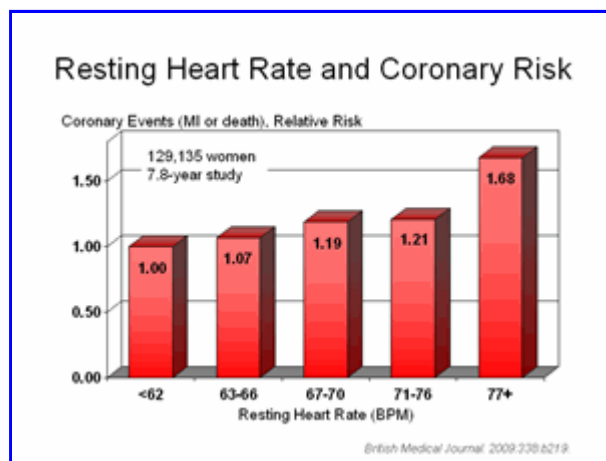
1. Knutson KL, et al. Association between sleep and Blood Pressure in Midlife, Archives of Internal Medicine, 2009;169(11):1055-1061.
2. Gangwisch JE, et al. Short sleep duration as a risk factor for hypertension, Hypertension 2006;47(5):833-839.

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## Resting Heart Rate Predicts Coronary Events

Resting heart rate is an easy test you can do on yourself. Now, new research shows that resting heart rate is an independent predictor of coronary heart disease and mortality. People with lower resting heart rates have a survival advantage over those with higher heart rates.

This finding comes from the Women's Health Initiative study and includes 129,135 women. Resting heart rates were determined on all women who were in good health at the start of the study. Researchers correlated their resting heart rates with deaths from coronary heart disease over the 7.8-year study. Women with a resting heart rate of 77 or higher were 68% more likely to experience a heart attack or death from heart disease compared to women with a resting heart rate of 60 beats per minute or less. Resting heart rate was found to be an independent predictor of heart disease even after adjusting for BMI, smoking, physical activity, blood pressure, and other common coronary risks.



Other lifestyle factors linked to increased risk of heart attacks in this study included:

- High blood pressure (increased risk by 69%)
- Diabetes (increased risk by 2.7 times)
- Smoking (increased risk by 2.3 times)
- High cholesterol
- Overweight
- High intake of saturated fat (animal fats)

When adjusting for all of these other risks, resting heart rate was still an independent predictor of coronary events (heart attack or death from a heart attack). Women with a resting heart rate of 80 or higher, compared to 60 or less, were 33% more likely to have a coronary event. Other studies have shown a similar relationship in men.

A factor that lowered risk of heart disease in this study was regular, physical activity. In fact, exercise is the best ways to lower resting heart rate. Activities such as brisk walking, biking, aerobics, and active sports strengthen the heart and lower resting heart rate. Resting heart rate can drop as much as 10-20 beats per minute when going from little activity to regular physical activity, 30+ minutes per day, most days of the week.

Check your resting pulse and compare it with the chart below to determine your risk. To check your pulse, sit quietly. Find your pulse on the thumb side of the wrist between the bone and tendons on the inner wrist. Check your pulse for a full minute, or half a minute and multiply by two.

### Resting Heart Rate\*

62 or below  
63-66  
67-76

### Risk Status (relative risk)

Ideal risk (1.0) – Doing great!  
Low risk (1.07) – Doing well.  
Increased risk (1.20) – Could be more active.

77 or higher

High risk (1.68) – Needs a good exercise program.

\* Beats per minute

**Reference:** Hsia J, et al. Resting heart rate as a low tech predictor of coronary events in women: prospective cohort study. British Medical Journal. 2009;338:b219.

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Links

**Plan & Prepare for the Flu –**

Use these checklists by the Centers for Disease Control and Prevention to make sure your company is prepared for a possible influenza pandemic:

<http://www.pandemicflu.gov/professional/business/index.html>

**Business Pandemic Checklist –**

In the event of a severe pandemic, businesses will play a vital role in protecting the health of their workforce, as well as limiting the negative impact to the economy and society. Planning for pandemic influenza is critical.

<http://www.pandemicflu.gov/plan/workplaceplanning/businesschecklist.html>

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Recipe

**Ratatouille**

Ratatouille is similar to a hearty stew. It's delicious served over brown rice or stuffed inside a wonton wrapper.

1	med	Onion, chopped
2	cloves	Garlic, minced
1	med	Green pepper, chopped
2 Tbsp		Olive oil
1	med	Eggplant, peeled and diced
1 can	4-oz	Mushrooms, sliced but not drained
1 can	14.5-oz	Tomato sauce, herb flavored
1	small	Zucchini, diced
½ tsp		Oregano, dried
¼ tsp		Basil, dried
¼ tsp		Thyme, dried
¼ tsp		Onion salt
1 tsp		Salt

In a large saucepan, sauté onion, garlic, and green pepper in olive oil until tender. Add remaining ingredients and simmer about 45 minutes or until vegetables are tender. The ratatouille is now ready to serve over brown rice or spooned into a soup bowl. You can also fill pre-baked pastry cups, wonton wrappers, or crepes.

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