

## FN-SSB.154

# EATING TO LIVE: Not Living to Eat!

Our understanding of nutrition today is based upon years of scientific study. Research has connected certain diseases to the lack or excess of certain nutrients; for example, a lack of calcium increases the risk for osteoporosis. It is important to remember, however, that there are other risk factors related to chronic disease besides diet, including genetics, physical activity and smoking. There is no guarantee that specific nutrients prevent chronic diseases, but making sound dietary choices can greatly reduce the risk factors for developing heart disease, some types of cancer, stroke and diabetes. Eating to live requires knowledge about portion sizes, physical activity and how to apply recommendations based on research to reduce chronic disease.

### Becoming Serving Savvy

Americans have grown accustomed to eating portion sizes that are much larger than recommended amounts. In addition, nutritional information on food packaging can be difficult to interpret and understand. To make sense of these labels, the Center for Science in the Public Interest has compiled some easy ways to remember the size of one serving.

Food	Serving	Looks like...
Meat, Fish, and Chicken	3 oz	a deck of playing cards
Pasta and Rice	1 cup	A DVD
Fruit and Vegetables	½ cup	a tennis ball
Cheese	1 oz	two saltines
Ice cream or Frozen yogurt	½ cup	tennis ball

MyPyramid ([www.mypyramid.com](http://www.mypyramid.com)) is a good place to start when determining how many servings of food from each food group you need each day and the amount of physical activity you need to maintain or lose weight.



Using MyPyramid will help you live a more healthful lifestyle. Don't be afraid to be adventurous when selecting foods to eat. Try a variety of foods and experiment with new recipes! If your favorite food happens to be high in fat or calories, try eating a smaller portion.

## Physical Activity

The philosophy of eating to live also includes including physical activity in your daily lifestyle to reduce the risk of becoming overweight. Physical activity is defined as the simple act of movement, so any voluntary body movement will result in using calories. More intense activity increases both your metabolism and heart rate.

The Surgeon General recommends that all adults participate in at least 30 minutes or more of moderate-intensity exercise every day. Exercise does not have to be difficult or joyless. To burn around 150 calories, you can perform the following activities for the prescribed amounts of time:

Time (minutes)	Activity
15	shovel snow; run 1½ miles; stair walk; jump rope
20	play basketball; swim laps
30	rake leaves; walk 2 miles; push stroller ½ mile; shoot basketball; bike 5 miles; dance fast; water aerobics
45	garden; play touch football

Keep in mind that the activity does not have to be fast-paced or of high intensity. Start slowly and increase the time that you exercise not the speed or pace. Be realistic in your goals and be flexible in your schedule. Physical activity includes choosing to climb the stairs instead of taking the elevator or parking farther from your destination than you normally would. Remember to check with your physician before beginning an exercise program. To start

a new activity schedule, choose activities you enjoy and someone you would enjoy doing them with.

Once your body adjusts to your new schedule, you'll see a variety of benefits. These benefits include improved self-confidence, weight control, sleep, energy and appearance; but less stress and anxiety. Exercise also lowers your risk for heart disease, hypertension, stroke and diabetes while strengthening your bones and an overall increase in quality of life.

## Obesity

A lack of energy balance most often causes overweight and obesity. Energy balance means that your energy IN equals your energy OUT. Eating right and including physical activity as part of a healthy lifestyle will help maintain a healthy weight.

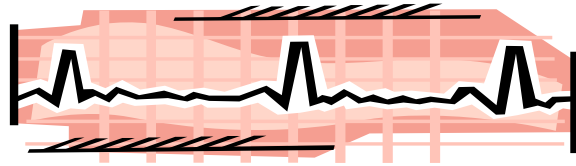
Despite being a country that is preoccupied with body image and weight loss, obesity continues to rise to epidemic levels. According to the Centers for Disease Control and Prevention, 64.5 percent of adult Americans are overweight and 30.5 percent are obese.

Current standards for healthy weight are based on a person's weight in relation to height, often referred to as Body Mass Index (BMI). Follow [http://www.nhlbi.nih.gov/guidelines/obesity/bmi\\_tbi.pdf](http://www.nhlbi.nih.gov/guidelines/obesity/bmi_tbi.pdf) for a copy of the National Institute of Health's Body Mass Index Chart. To calculate BMI, divide your weight (in pounds) by height (in inches, squared) and multiply the total by 704.5. A BMI of 30 or more is considered obese, while one between 25 and 29.9 is considered overweight. This number can be misleading in some ways. Very muscular people and pregnant or lactating women will likely come up with

inaccurate results. And BMI doesn't take into account how much of an individual's weight is fat and where the fat is located. This is important in assessing increased risk for some diseases.

The bottom line is that your weight will increase if your energy intake (the amount of food you eat) is more than your energy expenditure (the amount of energy used for body functions and physical activity.) With each decade, your calorie needs should drop about 2 percent. Even with the same activity level and diet, you could still gain weight and extra body fat. The average adult between ages 25 and 55 gains a half-pound per year.

Cardiovascular disease, high blood pressure, stroke, diabetes, arthritis, some cancers, breathing problems, and other illnesses have links to obesity. If you are overweight, losing just five to 10 percent of your total body weight may reduce your risk for some of these diseases.



### Cardiovascular Disease

Diseases of the heart and blood vessels are collectively known as cardiovascular disease. CVD is the leading single cause of death around the world today. In the age group of 25 to 44, men are 2½ times more likely to die of CVD than women are, but after 45 the incidence for both sexes is similar. Consequences of CVD are usually heart disease and strokes.

Coronary heart disease is the most common form of cardiovascular disease. Standards have been set by the American Heart Association in screening for a person's risk for CHD. The major risk factors for coronary heart disease include smoking, obesity, physical inactivity, hypertension, diabetes (insulin resistance), and high blood cholesterol. Each risk factor itself increases the risk for CHD. But people with all the risk factors greatly elevate the risk.

### AHA Standards for CHD Risk Factors

Risk Factors	Optimal	Borderline	Less than Desirable
<b>Total blood cholesterol</b>	<200 mg/dL	200-239	>240
<b>LDL</b>	<100mg/dL	130-159	>160
<b>HDL</b>	>60 mg/dL	40-59	<40
<b>Triglycerides, fasting</b>	<150 mg/dL	150-199	>200
<b>Obesity (BMI)</b>	18.5-24.9	25-29.9	>30
<b>Systolic blood pressure</b>	<120	120-139	>140
<b>Diastolic</b>	<80	80-89	>90

## AHA Dietary Recommendations

Dietary strategies to prevent heart disease, either through a modified diet or weight loss can be coupled with smoking cessation and adding physical activity to greatly reduce the risks. These interventions should be tried before drug therapy.

For the general population, AHA recommends the following healthy eating pattern.

- ♥ Consume a variety of fruits, vegetables and grain products, including whole grains. Choose low-fat milk products, fish, legumes (dried peas and beans), poultry and lean meats.
- ♥ Maintain a healthy body weight by balancing energy intake with energy needs.
- ♥ Maintain a desirable *Blood Cholesterol and Lipoprotein Profile* by limiting foods with a high content of saturated and trans fats (<10 percent of total energy intake) and cholesterol (<200 milligrams).
- ♥ Replace saturated fat with unsaturated fat (both long-chain omega-3 polyunsaturated and monounsaturated) from fish, nuts, and vegetables.
- ♥ Maintain a desirable blood pressure. Limit the intake of salt (sodium chloride) to less than 1.5 grams per day.
- ♥ If you choose to drink, limit alcohol consumption (no more than one drink per day for women and two drinks per day for men).

A nutritionally balanced diet improves the risks for CHD. Other dietary factors, such as soluble fiber; omega-3 fatty acids; folate; vitamins B<sub>6</sub>, B<sub>12</sub> and E; and soy proteins, may also

provide protection against heart disease.



## Hypertension

Hypertension occurs when arteries become narrowed and the heart must generate more pressure to push blood through the circulatory system. Readings greater than or equal to 140/90 mm Hg are considered hypertension. Prehypertension is considered to be blood pressure readings with a systolic pressure (the highest arterial pressure during each heart beat) from 120 to 139 mm Hg OR a diastolic pressure (the lowest blood pressure within the arterial blood stream during each heart beat) from 80 to 89 mm Hg.

A major research study called Dietary Approaches to Stop Hypertension (DASH) discovered that the same diet associated with lowering the risk of atherosclerosis, namely one that features plenty of fruits and vegetables, and little fat and saturated fat, also lowers blood pressure as well. The following chart compares the MyPyramid with the DASH eating plan.

*DASH and MyPyramid  
Daily Servings Comparison*

<b>Food Group</b>	<b>DASH</b>	<b>MyPyramid</b>
<b>Grains</b>	7-8	6-11
<b>Vegetables</b>	4-5	3-5
<b>Fruits</b>	4-5	2-4
<b>Milk (nonfat)</b>	2-3	2-3
<b>Meat (lean)</b>	≤2	2-3
<b>Calories</b>	2000	1600-2800

The DASH eating plan recommends servings for nuts, seeds, and dried beans (4-5 servings per week), while MyPyramid includes these foods in the meat group. Like MyPyramid, the DASH diet recommends that fats, oils and sweets be used sparingly.

### **Cancer**

Cancer is not a single disorder; each cancer is unique and has its own characteristics, requiring different treatments.

Based on epidemiological studies there is strong evidence that a diet high in fruits, vegetables, legumes and whole grains, along with a lower fat intake will reduce the risk of cancer while providing the best possible nutrition. A healthy weight and increasing physical activity are also keys to leading a healthful life.

Antioxidants are compounds found in foods that significantly decrease the adverse effect of oxidants on human tissue. Beta-carotene, vitamins C and E and selenium are examples of antioxidants. The best way to obtain more antioxidants in body cells is by eating foods high in antioxidants. The top antioxidant fruits are prunes, raisins, blueberries, strawberries, raspberries, plums, oranges, red grapes and cherries. The top antioxidant

vegetables are kale, spinach, Brussels sprouts, broccoli, beets, red bell pepper, onion, corn and eggplant.

### **Diabetes**

High blood glucose and not enough insulin or the body's inability to use insulin are characteristic of diabetes. There are two types of diabetes, type 1 (insulin-dependent) and type 2 (non insulin-dependent). A person with diabetes should work with a Registered Dietitian (RD) or Certified Diabetes Educator (CDR) to develop a balanced eating plan to manage blood glucose and lipid values and maintain a healthy weight.

Today, physicians are diagnosing pre-diabetes, which is defined as blood glucose levels between 100 to 125 mg/dL. Since over 80 percent of diabetics have impaired kidney function, loss of vision and CHD, early diagnosis is important.

### **Overall Recommendations for Diet and Health**

Genetics, gender, age and other factors affect the development of chronic disease in individuals, but healthcare professionals urge dietary control as part of a disease- prevention strategy. To know what changes you need to make, examine your personal and family history and present lifestyle habits. Good nutrition and participating in regular physical activity can help you reduce the risk of developing chronic disease and allow you to eat to live instead of living to eat!

**Access these websites for further information:**

- Healthy People 2010: [www.healthypeople.gov](http://www.healthypeople.gov)
- National Center for Chronic Disease Prevention and Health Promotion: [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp)
- Surgeon General's Report on Physical Activity & Health: [www.cdc.gov](http://www.cdc.gov)
- American Heart Association: [www.americanheart.org](http://www.americanheart.org)
- National Stroke Association: [www.stroke.org](http://www.stroke.org)
- DASH diet: [dash.bwh.harvard.edu](http://dash.bwh.harvard.edu)
- National Heart, Lung, & Blood Institute: [www.nhlbi.nih.gov/index.htm](http://www.nhlbi.nih.gov/index.htm)
- Body Mass Indicator Calculator: [www.nhlbisupport.com/bmi/bmicalc.htm](http://www.nhlbisupport.com/bmi/bmicalc.htm)
- National Cancer Institute: [www.nci.nih.gov](http://www.nci.nih.gov)
- American Institute for Cancer Research: [www.aicr.org](http://www.aicr.org)
- American Diabetes Association: [www.diabetes.org](http://www.diabetes.org)
- American Dietetic Association: [www.eatright.org](http://www.eatright.org)
- Dietary Guidelines Alliance:  
[www.nationaldairycouncil.org](http://www.nationaldairycouncil.org)
- Smoking Cessation: [www.lungusa.org](http://www.lungusa.org)
- National Institute of Diabetes & Digestive & Kidney Diseases: [www.niddk.nih.gov](http://www.niddk.nih.gov)

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