

The Pennington Biomedical Research Center is a world-renowned nutrition research center.

**Mission:**

To promote healthier lives through research and education in nutrition and preventive medicine.

The Pennington Center has several research areas, including:

Clinical Obesity Research

Experimental Obesity

Functional Foods

Health and Performance Enhancement

Nutrition and Chronic Diseases

Nutrition and the Brain

Dementia, Alzheimer's and healthy aging

Diet, exercise, weight loss and weight loss maintenance

The research fostered in these areas can have a profound impact on healthy living and on the prevention of common chronic diseases, such as heart disease, cancer, diabetes, hypertension and osteoporosis.

The Division of Education provides education and information to the scientific community and the public about research findings, training programs and research areas, and coordinates educational events for the public on various health issues.

We invite people of all ages and backgrounds to participate in the exciting research studies being conducted at the Pennington Center in Baton Rouge, Louisiana. If you would like to take part, visit the clinical trials web page at [www.pbrc.edu](http://www.pbrc.edu) or call (225) 763-3000.



**Promoting Healthier Lives Through  
Research and Education in Nutrition  
and Preventive Medicine**



PENNINGTON BIOMEDICAL RESEARCH CENTER

6400 Perkins Road  
Baton Rouge, LA 70808

225-763-2500

Visit Our Website at :  
[www.pbrc.edu](http://www.pbrc.edu)

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**Authors**

Beth Kalicki

Heli J. Roy, PhD, RD

**Division of Education**

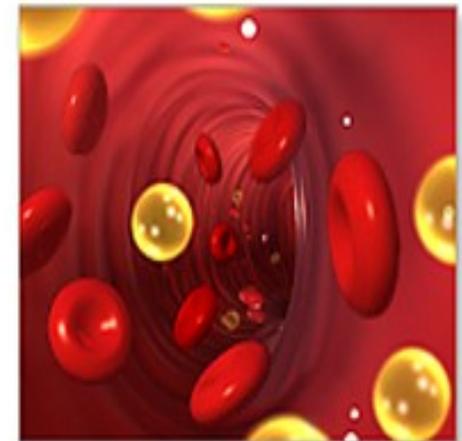
Phillip Brantley, PhD, Director

**Pennington Biomedical Research Center**

Claude Bouchard, PhD, Executive Director

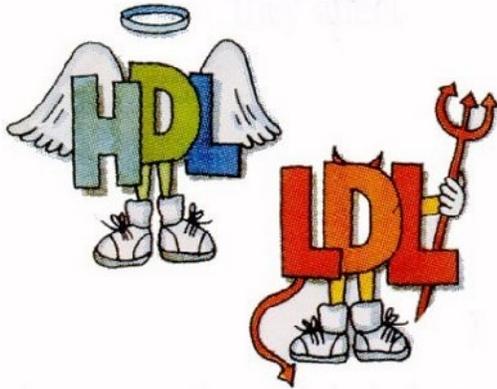
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# Facts about Cholesterol



Cholesterol in the bloodstream

Pennington Biomedical Research  
Center



## The Types of Cholesterol

- There are several types of cholesterol molecules but two are important for health:

HDL—High density lipoproteins, or good cholesterol, attempts to remove fatty deposits of plaque within your arteries.

LDL—Low density lipoproteins, or bad cholesterol, tends to leave fatty deposits that accumulate in your bloodstream and builds up on arterial walls. Eventually this buildup can narrow your arteries and cause a blood clot to form, which may lead to a heart attack or stroke.

How to remember—keep HDL high and keep LDL low.

- Standard Guideline for Total Cholesterol Levels:

Desirable level: Less than 200 mg/dL

Borderline: Between 200 and 239 mg/dL

High: 240 mg/dL and above

## THE FACTS ABOUT CHOLESTEROL

- LDL levels in the blood are controlled by the liver and the intestines.
- The liver makes cholesterol, which is used to make bile acids. The liver also assists in the removal of cholesterol from the blood.
- The source of cholesterol in the body is from intestinal absorption of cholesterol either from the diet or from bile.
- A diet rich in fiber, particularly soluble fiber, has been shown to reduce your blood cholesterol levels.
- When selecting foods to decrease cholesterol level, choose foods that are high in fiber, low in saturated fat, cholesterol and trans fatty acids.
- For optimal health, HDL cholesterol levels should be greater than 40 mg/dL.
- It is recommended that individuals with high LDL blood cholesterol levels or those who are on cholesterol medication, should eat less than 200 mg of cholesterol daily.
- LDL cholesterol levels should remain close to 100mg/dL or less.
- The higher your LDL level is, the greater your chance of getting heart disease.
- Ways to lower LDL levels and raise HDL levels include: exercising regularly, maintain a healthy weight and BMI, avoiding smoking, and increasing the amount of monounsaturated fats in your diet.

- Substituting soy protein for animal protein has been shown to lower your LDL cholesterol levels, this reducing your risk for heart disease.
- Estrogen, a female hormone, tends to raise HDL cholesterol levels. It removes the buildup of plaque within the arteries. This property of estrogen tends to protect premenopausal women from having high levels of LDL cholesterol.
- Postmenopausal women with high LDL levels, may benefit from drug therapy. It should be combined with a diet rich in fruits, vegetables, whole grains, high fiber foods, and low fat dairy products.
- Over 43% of hospital patients treated for coronary heart disease are under the age of 65.

According to the United States Center for Disease Control and the American Heart Association, approximately **66 million** American adults have a “Borderline” blood cholesterol level of **200–239 mg/dL**; and **37.7 million** have “High” cholesterol levels of **240 mg/dL or greater**. This places them at an increased risk of having a heart attack or a stroke.

