Calcium, It’s Role and Sources

Why do we need calcium?
Calcium has many roles in the body. In children, it is essential for proper growth and bone development. It is necessary for muscle contractions and proper blood clotting.

New research shows that calcium can help lower overall blood pressure. Lack of calcium has been linked to certain types of cancers; colon cancer in particular. It has also been shown to help prevent kidney stones, as well as cardiovascular disease. Calcium intake is also potentially linked to obesity. Individuals who consume a lot of calcium daily, particularly from dairy foods, tend to weigh less and have less body fat than people with lower intake of calcium.

Calcium may also help improve symptoms of pre-menstrual syndrome. Calcium supplementation of 1200-1600 milligrams a day should be considered as a safe and sound treatment option in women with premenstrual syndrome. An Adequate level of calcium can positively impact and regulate hormones involved in mood and depression.

Efficient absorption of calcium depends on the amount of Vitamin D in the body. Vitamin D is synthesized by the skin through sun exposure and it is also obtained from foods. The best dietary sources of Vitamin D are tofu, soybeans, alfalfa, turnip greens, nuts, seaweed and figs. Certain milk and dairy products may also be good sources of Calcium.

What happens if I don’t consume enough calcium?
Calcium intake tends to be low in the American diet and deficiency of calcium leads to osteoporosis, a brittle bone disease. When you do not have an adequate intake of calcium, your body begins to draw calcium from the bones to keep the blood calcium level normal. Calcium is vital for normal muscle contractions, blood clotting, and nerve functioning. If the body withdrawals calcium from bone for a long period of time, your bones may become brittle, and this will cause you to develop the bone degeneration disorder called osteoporosis.

What are the best sources of calcium?
Dairy products such as milk, yogurt, and cheese are the best sources of calcium, but vegetables sources can also be significant sources of calcium. It is important that we get an adequate amount of calcium from our diet, so our bones remain strong.

Some dietary calcium choices, other than dairy products, includes spinach, collard greens, turnip greens, broccoli, baked beans, okra, trail mix, almonds, black eyed peas, and green peas. Some spices are also high in calcium such as cumin, coriander, cloves, oregano, and mustard seeds.

How much calcium do we need?
The body needs different levels of calcium at different ages.

Individuals between the ages of 0 to 6 months need 210 mg of calcium per day. Those who are 7 to 12 months old need 270 mg of calcium daily. Children 1 to 3 years old need to have 500 mg of calcium daily. Kids 4 to 8 years old need to have about 800 mg of calcium daily. Children 1 to 3 years old need to have 500 mg of calcium daily. Kids 4 to 8 years old need to have about 800 mg of calcium daily for proper bone development. And adolescents, ages 9 to 18, whose bones are growing at a fast rate, need 1,300 mg of calcium per day. Adults in the age range of 19 to 50 need to have a dietary intake of 1,000 mg per day, and finally, those who are older than 51 need to consume 1,200 mg of calcium per day.
About Pennington

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:

- Epidemiology and Prevention
- Physical Activity and Health
- Cancer
- Diabetes
- Obesity
- Neurodegeneration
- Genomics and Molecular Genetics
- Stem Cell and Developmental Biology
- Neurobiology
- Nutrient Sensing and Signaling

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 or call (225) 763-3000.