

IN THE KNOW ABOUT NUTRITION

Volume: 2019 Issue: 6

Texas A&M AgriLife Extension Service-Lubbock County * PO Box 10536 * Lubbock, TX 79408
916 Main, Suite 401 Lubbock, TX 79401 * 775-1740 * Fax 775-1658 * <http://lubbock.agrilife.org>

The Importance Between Calcium and Vitamin D

What does calcium do in the body?

Calcium is mainly used for the maintenance of strong bones and teeth. Calcium is also used for blood clotting, sending and receiving nerve signals, squeezing and relaxing of muscles this, this includes the heart muscle, and the release of hormones and other chemicals. Calcium helps prevent against Osteoporosis and Hypertension.

Vitamin D

Vitamin D is a fat-soluble vitamin that can be found in a variety of foods, is often added to other foods and can be obtained from sunshine. Without sufficient vitamin D, bones can become thin and brittle. Adequate amounts of vitamin D prevent rickets in children and osteomalacia in adults. Together calcium and vitamin D can help protect older adults from osteoporosis. Other roles for vitamin D in the body include cell growth, neuromuscular and immune function, and the reduction of inflammation.

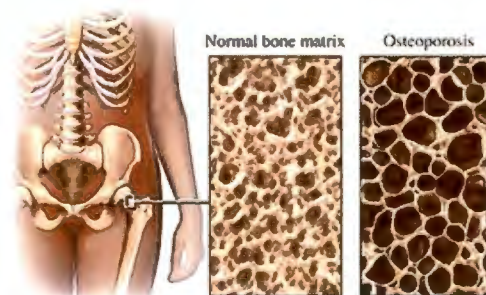


Did you know?

Without Vitamin D, Calcium cannot be absorbed. We often get a majority of our vitamin D through sunshine, but because of little time in the sun or the use of sunscreen we don't get as much as we need through the sun. This is why in the 1920's milk was fortified with vitamin D.

Osteoporosis

This disease causes bones to become weak and brittle, which can lead to fracture, breaks and pains. These fractures and breaks are common in the hip, wrist or spine area. The bone is a living tissue that is constantly being rebuild and broken down. The biggest issue with Osteoporosis is the bone is not able to keep up with the restoration process. Both women and men can be affected by Osteoporosis, but women who are past menopause are at a higher risk for this. There are many factors that increase the risk of getting Osteoporosis, such as, family history, age, gender, hormone levels, thyroid problems, low calcium, medications, healthy diet and weight.





Choose MyPlate to ensure that you are obtaining adequate amounts of calcium. Calcium is not only found in **Dairy**, but in some **Protein, Grains, Fruits, and Vegetables**.

Food's that contain Calcium	
Dairy	All Dairy foods Milk, Yogurt, Ice cream, Cheeses, Fortified Almond and Soy milk
Protein	Fish: Salmon, Sardines with bones Nuts: Almonds, Sunflower seeds
Vegetables	Collard greens and Spinach
Grains	Fortified cereals and whole grains
Food's that contain Vitamin D	
Dairy	All Dairy foods: such as Milk, Yogurt, Ice cream, Cheeses, Fortified Almond and Soy milk
Protein	Fatty fish, like tuna, mackerel, and salmon
Fruits	Fortified orange juice,
Vegetables	Mushrooms, potatoes
Grains	Fortified cereals and whole grains

References:

1. (2018, June 04). MedlinePlus. *Calcium in diet: MedlinePlus Medical Encyclopedia*. Retrieved July 03,2018, from <https://medlineplus.gov/ency/article/002412.htm>
2. (2017, October 20). Choose MyPlate. *Dairy*. Retrieved July 03,2018, from [http:// www.choosemyplate.gov/dairy](http://www.choosemyplate.gov/dairy)
3. 2017, October 20). Choose MyPlate. *Photo of MyPlate*. Retrieved July 03,2018, from [http:// www.choosemyplate.gov](http://www.choosemyplate.gov)
4. Mayo Clinic. Osteoporosis. Retrieved March 19, 2019, from <https://www.mayoclinic.org/diseases-conditions/osteoporosis/symptoms-causes/syc-20351968>
5. (2018, November 9). National Institutes of Health . Vitamin D- Health Professional Fact sheet. Retrieved March 20, 2019, from <https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/>
6. (n.d.). Old Ways Cultural Foods Traditions . Vitamin D sources for Vegans and Vegetarians. Retrieved March 20, 2019, from <https://oldwayspt.org/blog/vitamin-d-sources-vegans-and-vegetarians>

Created by: Kimmi Moreau, TTU Dietetic Intern 2019
 For more information contact:
 E. Kay Davis, CEA-FCH, Lubbock County, 806-775-1740