

## Feed Your Bones with Calcium

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Are you nearing your forties? If yes, then this is the right time to feed your bones with good amount of calcium. Everyone must be aware of the decalcification during our adulthood journey, and so, I am not going to get you more into the decalcification and its complications. But I would like to give you some insights on the significance of calcium in our bone health.

Among the nutrients the minerals forms the important role in building up healthy bones. The minerals like calcium, magnesium, potassium, vitamins like beta-carotene and protein are essential for bones especially knees. Calcium helps in the bones calcification which is when deficient can cause several bone disorders like osteoporosis, arthritis, fractures and so on. Before knowing the sources, we all must have some basic knowledge on the mineral calcium.

### What is calcium?

There are certain minerals that plays important role in the development and growth of human bones. Not only just bone functions, it performs certain various other functions too, in our body. Similarly, calcium is one of the mineral that performs many important functions in our bone health.

Calcium is not produced in our body and so, it must be consumed in adequate amounts to get it used by the human organ system. A calcium rich diet, is necessary to keep your bones healthy, muscle contraction, clotting of blood and maintaining a proper heart beat.

### Calcium rich diet

A calcium rich diet is inclusive of all the milk and milk products. But there are certain other foods that also hold an important calcium content which can be included in our weekly shopping.

- 1 cup of Soybean (Cooked) - 175mg of calcium
- 2 dried figs - 65mg of calcium
- 1 whole orange - 55mg of calcium
- 8oz of Vanilla Ice cream - 85mg of calcium
- 1 cup of fresh cooked broccoli - 60mg of calcium.

### Hypocalcemia

Hypocalcemia is the calcium deficiency disorder, that occurs when the calcium levels in the blood is lower than 8.8ml/dl. A long term deficiency leads to cataracts, dental disorders, alterations in the brain and the major disorder is osteoporosis, the bone disorder.

It can also be caused due to the lack of vitamin D. In most cases, it is asymptomatic. But if there is severe deficiency, the symptoms like muscle cramps, tingling of lips and fingers may occur. This deficiency is so common that, there are more than 1 million cases per year (India). It requires a lab tests and imaging for better diagnosis and it can be treatable with proper medical care.

The calcium deficiency is so common among the people who are in low and they are listed as below.

- Post menopausal stage
- People with amenorrhea
- People with lactose intolerant
- People who are vegetarians.

This deficiency has several complications leading to

- Muscle problem
- Osteoporosis and osteopenia.
- Tooth decay
- Severe PMS
- Nail and skin symptoms
- Depression.

However, this deficiency disorder can be corrected when the calcium is adequately supplied to the body. Consuming calcium rich diet ensures that the supply of the mineral in surplus amounts. It is always best to consult a qualified nutritionist/dietitian to plan a menu that aids in providing the best results.

### Hypercalcemia

Hypercalcemia is a condition that is characterized by higher amounts of calcium in the blood usually above normal. Alike deficiency, too much of calcium also imposes greater risk in many bodily systems.

This is characterized by symptoms like loss of appetite, nausea and vomiting, constipation and depression. Though these are very common symptoms, prolonged complaints make the healthcare worker to examine the calcium levels too. Severe hypercalcemia can damage your kidneys, limiting their ability of cleansing the blood and removing the toxic fluids.

Certain health conditions like cancer, tuberculosis, thyroid diseases, chronic kidney diseases and severe fungal diseases may also lead to elevated levels of calcium in the blood. This can be corrected with certain lifestyle changes. These changes are very easy to fol-

- Drinking excessive water that is keeping your body hydrated may lower the calcium levels and thus preventing us from the formation of stones.
- Quitting smoking is one of the important lifestyle changes that may protect you from cancers and other health issues.
- Strengthening bones through exercises and training promotes bone strength and health.
- Following the guidance of health care practitioner.

Mild hypercalcemia does not require any treatment but it is always best to speak with your doctor if your calcium levels are high.

### Food sources

The major foods that contribute our calcium need are from dairy sources. Several calcium fortified beverages are available in the market. These products, though a processed one, an advice from a health professional will help you to choose the right one. While it is impractical to depend on branded commercial foods for our nutritional supply, it is always best to choose organic and natural food sources for our requirement. In that note, here are some of the calcium rich sources that can be taken in your regular diet to overcome the calcium deficiency.

Milk is a super food according to healthcare professional. Though it claims many controversies in quality, it always proves to be a best food. Milk is a power-packed food with almost important nutrients that are responsible for the effective function of our body. A large study has found that the milk consumption may slow the progression of knee arthritis. Milk is a complete food possessing all the essential nutrients including protein, Calcium and all trace minerals concerning to the effective bone development, thus it should be an important element or food in the basic diet of people under all age groups. A glass of milk a day could help stop women's knees from creaking, claim researchers.

Cheese is the most fun-filled food that attracts all age group people. An attempt can be to incorporate cheese in varied recipes to ensure a good development and functioning of bones. Moreover this cheese is rich in probiotics, which are proved to be beneficial in gut health of the individual. While this has been into practice

when as a kid, the GI track illness at the later stages of adulthood can be protected.

Tofu, the meat for a vegan! This tofu is a best friend for woman during her menopause. The soy isoflavones present in the tofu, aids in the decrease of bone loss and increase the bone mineral density during menopause. Tofu is rich in protein, iron and if a calcium rich food is used for curdling, then it is excellent in its calcium too. The major nutrients like protein and calcium are basically essential for bones. Hence, make tofu an important meal in your routine diet.

Sesame seeds: Sesame seeds are an excellent source of copper, a very good source of manganese and a good source of calcium, magnesium, phosphorous, iron, zinc and molybdenum. The copper in the sesame seeds provide relief for rheumatoid arthritis as it possesses the anti inflammatory and anti oxidant enzyme system. In addition, it plays an important role in the activity of linking of collagen and elastin- the ground substance that provide structure, strength and elasticity in the blood vessel, bones and joints.

Green leafy vegetables specially Spinach: they are the rich sources of calcium and other bone building minerals and vitamins like vitamin K, folate, vitamin C. getting calcium from plant based choices is the best decision and a earth friendly choice of being healthy.

Apart from those sources, one's diet should be filled with fish, dry fruits, nuts and legumes to combat the micronutrient deficiency disorders. Always consult a qualified health professional to plan your meal and correct your eating pattern.

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