

Essential Element for Bones

1. Introduction

Bones support the body structurally, protect our vital organs, and work with muscles to allow us to move. Calcium is a prerequisite for the growth of healthy bones.

2. Calcium

Recommended Amounts

Age	Calcium (mg)
0-6 months	200 mg
7-12 months	260 mg
1-3 years old	700 mg
4-8 years old	1000 mg
9-18 years old	1300 mg
19-50 years old	1000 mg
50+	1200 mg

Calcium Rich Foods



3. Deficiency of Calcium

Bones will release calcium into the blood if the diet does not provide enough, and no symptoms usually occur.

A more serious deficiency of calcium, called hypocalcemia

Symptoms of hypocalcemia:	Condition result in hypocalcemia
Muscle cramps	vitamin D or phosphate deficiency
Numbness in fingers	long-term use of laxatives
Poor appetite	overconsumption of magnesium
Abnormal heart rate	lack of parathyroid hormone

Osteoporosis

It is a bone disease that caused by the loss of calcium from bones. This makes bones brittle and thin.

Postmenopausal women, people with lactose intolerance, vegans are most likely suffered from osteoporosis.

You can never regain the bone density you had in your youth; you can only prevent rapidly thinning of bones.



4. Calcium supplement

A doctor may recommend calcium supplements for people who have a calcium deficiency. Many calcium supplements also contain vitamin D and magnesium. Vitamin D helps the body absorb calcium while Magnesium plays a role in strengthening bones.

Types of supplements

- **Calcium citrate:** This contains 21% elemental calcium. It is useful for people with inflammatory bowel disease, achlorhydria, and some absorption disorders.
- **Calcium carbonate:** This contains 40% elemental calcium. This type is commonly available, and it is relatively cheap (It is derived from fossilized coral reefs, oyster shell, etc.)

However, it is also most likely to cause gas, bloating. The stomach contains hydrochloric acid which will react with calcium carbonate to form carbon dioxide. Hence there will be pressure build up in stomach and give uncomfortable feeling.



side effects of high calcium levels

- calcification of soft tissues and blood vessels
- kidney stones
- Constipation



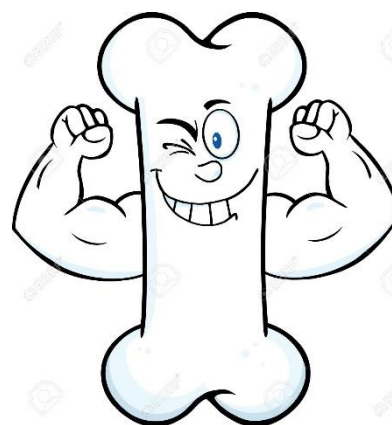
Interact with some drugs

Calcium dietary supplements can interact or interfere with certain medicines that you take.

- Calcium can reduce the absorption of these drugs when taken together:
 - Bisphosphonates (to treat osteoporosis)
 - Antibiotics of the fluoroquinolone and tetracycline families
 - Levothyroxine (to treat low thyroid activity)
- increase calcium loss in the urine (Antacids containing aluminum or magnesium)
- reduce calcium absorption (Mineral oil and stimulant laxatives)

5. Conclusion

Calcium is essential for building and maintaining healthy bones and teeth. It is best to obtain sufficient calcium through dietary sources. Anyone who is considering taking supplements should ask their healthcare provider for advice.



COMIC CORNER



RELAXING ZONE

		8	5	6	3	9	1	
		6	4			3		2
	3		2					
			8		2	7		
	7	2				5	3	
		3	7		6			
					5		9	
2		7			4	8		
	5	1	3	2	8	6		

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4	7	6	8	2	3	1	5	9
3	5	8	1	4	9	7	6	2
1	9	2	6	7	5	4	8	3
9	2	6	1	7	5	3	4	8
8	3	5	1	4	9	2	7	6
6	4	8	3	2	7	4	1	9
5	6	2	8	1	4	6	7	3
2	8	3	7	4	9	6	1	5
7	1	9	6	5	8	2	4	3

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