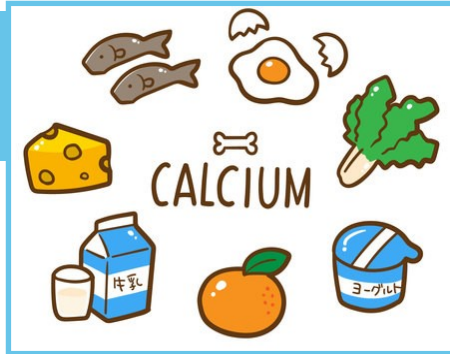


# Calcium for:



Calcium is a mineral that cannot be synthesized by the body and must be obtained from food. 99% of the calcium in the body is used to form bones and teeth, and bones also serve as calcium stores. The remaining 1% is in the blood and cells and plays a role in maintaining normal muscle and nerve function.

## absorbed in the small intestine

Calcium in food is dissolved by stomach acid and sent to the intestines as calcium ions, where it is absorbed. However, not all the calcium absorbed from the small intestine is used. Absorbed calcium is carried to every corner of the body by the blood, only the necessary amount is absorbed, and the rest is excreted in feces and urine.

Calcium in the blood remains at the same concentration at all times. When calcium intake decreases, the amount of calcium leached from the bones increases, resulting in a decrease in the amount of calcium stored in the bones.

|  |   |  |
|--|---|--|
| <p>irritability and stress relaxation, nerve stabilization</p> | <p>Materials and reinforcement of bones and teeth</p> | <p>Move muscles</p>                            |
| <p>Promotes secretion of saliva, gastric juice, etc.</p>       | <p><b>The roles of Calcium</b></p> <p><b>Ca</b></p>   | <p>Smoothly convey commands from the brain</p> |
| <p>Anti-allergic effect</p>                                    | <p>Cell metabolism</p>                                | <p>Blood coagulation</p>                       |

## Bone cells are replaced every day!



In the body, bones are repeatedly created and broken down (calcium is leached from the bones) every day. This is called bone metabolism. Healthy bones have a good balance between building and breaking, but if you don't get enough calcium from your diet, your bones will have to break down more and more to release calcium, and if you break down too much, you can't keep up with the production. The bones will become thin and brittle. Calcium is a component that is difficult to absorb, so daily intake is important.

## CALTOP-D \$50(SRP)1300tabs

"CALTOP-D" is a calcium supplement that contains a well-balanced combination of Ionizing Calcium, vitamin D3 and trace minerals!



## Calcium & wrinkles



A presentation was made at the Endocrine Society of Yale University stating that facial bones also decrease in bone mass as we age, causing wrinkles and sagging. A university research group examined the skin and bone density in 11 areas on the face and neck of 114 women aged around 50 and within three years of postmenopause, and found that there was a certain correlation between women's wrinkles and bone density. They found that people with tight skin had higher bone density, and people with more wrinkles had lower bone density. In order to maintain a youthful appearance, it is important to slow down bone aging. In order to slow bone aging, it is important not only to actively take in calcium, but also to take vitamin D, which increases calcium absorption, and to exercise moderately.

Foods rich in calcium (Ca) include small fish, seaweed, milk, dairy products, root vegetables, and green and yellow vegetables. For example, the average absorption rate is 50% for milk, 30% for small fish, and 17% for spinach, in the following order: 1. Dairy products, 2. Small fish, and 3. Vegetables. In addition, vitamin D, lactose, and lysine (amino acid) are listed as ingredients that promote Ca absorption. Vitamin D is found in mushrooms and fish, and lactose and casein are found in dairy products. However, when calcium in the blood decreases due to various causes such as ●menopause in women ●vitamin D3 deficiency ●lack of exercise ●too much salt and sugar intake ●stress ●medications ●smoking ●processed foods (snacks, instant foods, ham), etc. Calcium is leached from the bones, and naturally the amount of calcium in the bones decreases. Older women and postmenopausal women are particularly susceptible to osteoporosis, a condition in which bones become brittle and easily break. Therefore, we recommend that those who tend to be in short supply of calcium, make some kind of supplementation.



|                    |                  |                         |                     |                   |
|--------------------|------------------|-------------------------|---------------------|-------------------|
|                    |                  |                         |                     |                   |
| Youth<br>500~900mg | Adults<br>1000mg | Breastfeeding<br>1200mg | menopause<br>1200mg | Elderly<br>1200mg |

参考資料 : <https://www.j-milk.jp/knowledge/nutrition/h4ogb40000003ku5.html>  
<http://www.calcium-ion.jp/20180622/1315> <https://www.pref.chiba.lg.jp/kenshidou/faq/306.html> <https://www.orthomolecular.jp/nutrition/calcium/>  
<https://www.jpof.or.jp/osteoporosis/nutrition/calcium.html>