

Why we need calcium

For healthy bones, men and women need 800 to 1200 milligrams of calcium a day. Children over one year require 800 mg a day. Women require 1000 - 1500 mg a day during pregnancy, lactation, and menopause.

We have more calcium in our bodies than any other mineral. Most of it is used to build and maintain bones and teeth, but it also plays a crucial role in the health of the heart, blood vessels and nerves.

Calcium is involved in most of the body's enzyme actions, balancing pH, releasing neurotransmitters, contracting muscles, regulating heartbeat and clotting blood.

Too much calcium

Excess calcium may arise with excess intake of Vitamin D. It can cause calcification which can lead to the formation of kidney stones. It can also cause problems for the heart.

Not enough calcium

Shortage of calcium can lead to a wide range of problems including muscle twitching, cramps, nervousness, insomnia, joint pain and high blood pressure.

Sources of calcium

Food sources of calcium are listed below together with sources of vitamin D, which is needed to help the small intestine absorb the calcium.

Some foods can rob our bones of calcium. These include animal protein (meat and dairy products), caffeine, many processed foods containing phosphorus or phosphate additives, and fizzy drinks. Other 'robbers' include stress, lack of exercise, lack of stomach acid and hormone imbalance.

Sources of calcium (mg per 100 grams)	Sources of Vitamin D
<ul style="list-style-type: none"> • Kelp (1093) • Cheddar cheese (750) • Kale (249) • Almonds (234) • Brewer's yeast (210) • Parsley (203) • Brazil nuts (186) • Goat's milk (129) • Tofu (128) • Dried figs (126) • Sunflower seed (120) • Whole milk (118) • Buckwheat (114) • Olives (106) • Broccoli (103) • Cottage cheese (94) • Blackcurrant (60) • Pumpkin seeds (51) • Soya bean sprouts (48) 	<ul style="list-style-type: none"> • Sunlight (Vitamin D is made in the skin) • Oily fish: salmon, herring, sardines • Butter • Egg yolks • Fortified foods (some cereals, margarine and milk)

Notes

It's important to eat a wide range of calcium-containing foods because

- the ability to absorb the calcium from different foods varies, for example the calcium in spinach is less easily absorbed than that in kale; and
- some foods in the list above (dairy proteins) can inhibit the retention of calcium in the bones.

References

Holford, P (2004) *New Optimum Nutrition Bible*. London: Piatkus.

Murray, M T (2001) *Encyclopaedia of Nutritional Supplements*. New York: Three Rivers Press.