

**CALCIUM & D3** is a formula that combines calcium in citrate form for increased absorption and vitamin D3 which contributes to the normal absorption and utilisation of calcium.

Each capsule provides 704 mg of calcium citrate which is equivalent to 169 mg of elemental calcium.

**HEALTH CLAIMS (EU Regulation 432/2012):** *Calcium and vitamin D are necessary for the maintenance of bones and teeth and normal muscle function. Vitamin D contributes to the absorption and utilisation of calcium and phosphorus, and helps maintain normal blood calcium levels. Vitamin D contributes to the normal operation of the immune system.*

**Ingredients:** Calcium citrate, anticaking agent (magnesium salts of fatty acids), cholecalciferol (vit. D3), starch, sucrose, vegetable capsule (glazing agent: hydroxypropylmethylcellulose; humectant: purified water).

#### Nutritional information:

#### 1 capsule (830 mg)

Calcium (citrate)	169 mg (21 %*)
Vitamin D3 ( 55 IU / caps.)	1,4 µg (28%*)

\*NRV: Nutrient Reference Value in %.

#### Size and format:

150 vegetable capsules.

#### Recommended daily dose:

1–4 capsule daily with food. If you are taking medications, take this product a few hours before or after them.

Do not exceed the stated recommended daily dose.

#### Indications and uses:

- Calcium deficiency in the body.
- High blood pressure.
- Osteoporosis prevention and treatment.
- Premenstrual syndrome and menopause.
- Maintenance of healthy nails, hair and skin.

#### Cautions:

Consult a health-care practitioner prior to use if you are pregnant or breast-feeding.

#### DETAILS:

This formula combines calcium citrate, one of the most absorbed forms of calcium, with Vitamin D3 to ensure optimal calcium absorption in the body and to cover calcium deficiencies.

A balance of all minerals is ideal for the proper functioning of the body, but in many cases there is only a deficiency of one mineral and supplementation is necessary.

#### INGREDIENTS:

**CALCIUM (citrate):** one of the most easily assimilated forms of calcium, it also has a low risk of forming kidney stones and is very well absorbed by people with low gastric acidity.

Calcium is a mineral whose main function is to help in the formation and maintenance of healthy bones and teeth. A 99% of the calcium in the body is found in the bones and teeth, while the rest regulates enzyme activity and muscle function, takes care of the transmission of nerve impulses, regulates the heartbeat and is involved in blood clotting. Calcium is noted for its properties in reducing the risk of osteoporosis and lowering high blood pressure <sup>(1-3)</sup>.

**VITAMIN D3 (cholecalciferol):** Vitamin D is converted in the kidneys to its most effective form, calcitriol (1,25-dihydroxycholecalciferol D3), promotes bone reabsorption of calcium and other minerals, and stimulates calcium absorption through the small intestine <sup>(4)</sup>.

The reduced oestrogen production after menopause leads to a worsening of the balance of minerals in the body and a less effective transformation of vitamin D3 into its more active form. Consequently, already in the premenstrual phase, women should ensure an optimal supply of minerals and vitamin D3 for strong and healthy bones. Older people in particular should pay attention to appropriate prevention of bone loss and bone fractures. During the growing years, calcium is important for building strong and healthy bones and teeth <sup>(4,5)</sup>.

The heart muscle benefits from adequate calcium intake, especially in older people exposed to any kind of stress. Calcium regulates heart rhythm, provides healthy blood vessel tone and regulates blood pressure. Recent studies also attest to the link between mineral levels and high blood pressure <sup>(6)</sup>.

Calcium appears to play an important role in the prevention of pregnancy-induced hypertension.

It is a mineral to consider during premenstrual syndrome (PMS) as it can help reduce emotional imbalances, mood swings, irritability, depression, breast tenderness and a tendency to oedema <sup>(2)</sup>.

#### References:

- 1) Napoli, Nicola, et al. "Effects of dietary calcium compared with calcium supplements on estrogen metabolism and bone mineral density." *The American journal of clinical nutrition* 85.5 (2007): 1428-1433.
- 2) Spangler, Mikayla, et al. "Calcium supplementation in postmenopausal women to reduce the risk of osteoporotic fractures." *American Journal of Health-System Pharmacy* 68.4 (2011): 309-318.
- 3) Tucker, Katherine L. "Osteoporosis prevention and nutrition." *Current Osteoporosis Reports* 7.4 (2009): 111.
- 4) Rizzoli, René, et al. "The role of calcium and vitamin D in the management of osteoporosis." *Bone* 42.2 (2008): 246-249.
- 5) Vallecillo, G., et al. "Treatment of osteoporosis with calcium and vitamin D. Systematic review." *Medicina clinica* 115.2 (2000): 46-51.
- 6) Quesada Gómez, J. M., and M. Sosa Henríquez. "Nutrición y osteoporosis. Calcio y vitamina D." *Revista de Osteoporosis y metabolismo mineral* 3.4 (2011): 165-182.