



CHEWABLE VITAMIN D₃ 1,000 IU

Natural Chocolate Flavour

UPC CODE 0 646420 5253 7

NPN # 80016452

NATURAL HEALTH PRODUCTS DIRECTORATE (NHPD) CLAIMS:

Jamieson Chewable Vitamin D₃ 1,000 International Units (IU) is approved for the following NHPD claims:

- Helps in the development and maintenance of bones and teeth
- Helps in the absorption and use of calcium and phosphorus

Product Details

Jamieson's Chewable Vitamin D₃ 1,000 IU is the first flavoured chewable vitamin D product on the market. It is formulated with a delicious natural chocolate flavour and natural colours, making it a great-tasting option for consumers that prefer not to swallow regular vitamin D tablets. Each chewable tablet contains 1,000 IU of vitamin D₃,

GENERAL INFORMATION

Vitamin D was originally thought to be a hormone because it functions the same way a hormone does, in that it is made by one organ in the body to work for another.^{1,2} The liver and kidney are the two organs that work to convert vitamin D to its active hormone form, vitamin D₃.^{1,2}

Vitamin D is a fat-soluble vitamin that regulates calcium metabolism and is necessary for the calcification of bones and teeth.^{1,2,3} Vitamin D is primarily found in two forms: D₂ (ergocalciferol) and D₃ (cholecalciferol). Vitamin D₂ is derived from plant material, and D₃ is the active form of this nutrient found in mammals and humans.^{1,2}

Jamieson uses vitamin D₃, found in the finest natural lanolin on sun-drenched farms, in its formula. Lanolin is a type of fat that comes from the wool of living sheep; this is considered to be one of the most natural forms of vitamin D. However, it is important to note that no harm is inflicted on the animals because the wool is sheared from the sheep before any processing occurs. Furthermore, because the lanolin is highly synthesized and purified using a process of hundreds of steps in a state-of-the-art manufacturing facility, the finished product does not contain any traces of lanolin (animal material).

The liver makes a precursor vitamin D that circulates to the skin, where it is exposed to ultraviolet (UV) rays from the sun. The UV light acts upon cholesterol in the skin and works simultaneously with the liver and kidneys to produce vitamin D₃. Only this form of vitamin D can be made within the body.^{1,2} Vitamin D is readily absorbed from the small intestine and is stored mainly in the liver and other fat deposits.

In addition to its role in calcium absorption, vitamin D induces the uptake of phosphate and magnesium from the intestines. These are two of the minerals involved in the regulation of serum calcium levels, which are closely regulated in the body to maintain optimal muscle contractility and cellular function.³

Vitamin D₃ regulates the concentration of calcium in the blood. When there is adequate calcium in the diet, vitamin D helps move any excess calcium from the blood and deposits it in the bones.³ Vitamin D₃ can also increase blood calcium when levels are low by enhancing intestinal calcium uptake; removing calcium from the bones and drawing it into the blood (bone resorption); and reducing calcium excretion through the kidneys (renal reabsorption), so that less is excreted in the urine. Vitamin D ultimately normalizes blood calcium levels by directing calcium concentrations throughout the body.³

While vitamin D is well-known for the important roles it plays in helping the body to absorb calcium and maintaining strong bones, new research also

For Accidental Overdose (such as child ingesting formula)
Dial 911, 0 for operator assistance or call your nearest Poison Control Centre.

For Professional Use Only
The information contained here has been accumulated from many sources.
Indications are not intended as cures, they are simply a guideline to be used at your professional discretion.



shows that vitamin D may be effective for helping to reduce the risk of certain cancers by up to 60%:

- In a four-year study, almost 1,200 healthy post-menopausal women were randomly assigned to receive calcium alone (1,400-1,500 mg daily), calcium plus vitamin D₃ (1,100 IU daily) or a placebo. Researchers found that those women who took calcium plus vitamin D₃ had a substantial reduction in all-cancer incidence compared with those who did not take the supplements.⁴
- Researchers from the Moores Cancer Center at UCSD collected and analyzed data from 63 observational studies that looked at the relationship between vitamin D status and the risk of developing cancer. The authors concluded that adequate vitamin D supplementation may offer a protective effect against the risk of breast, prostate, colon and ovarian cancers.⁵
- In a previous study, these same researchers found that individuals with a sufficient intake of vitamin D had a 50% reduction in the incidence of colorectal cancer. This led the authors to recommend daily supplementation with 1,000 IU of vitamin D for prevention of this type of cancer.⁶

Evidence now suggests that the current vitamin D recommendation for healthy individuals of all ages (200-600 IU per day) is too low. While many researchers now advise increasing daily vitamin D intake to 1,000 IU, this amount is still well below the safe upper intake level of 2,000 IU per day established by the National Academy of Sciences.

Vitamin D deficiency can occur if dietary intake is inadequate or exposure to sunlight is limited, and can result in rickets in children, and osteomalacia or osteoporosis in adults. Due to the recent findings of numerous studies, many researchers advise that all adults in Canada should consider supplementing with 1,000 IU of vitamin D daily during the fall and winter

months. Those at higher risk of having low vitamin D levels – older adults, individuals with dark skin, those who spend significant time indoors and those who wear clothing that covers most of their skin, or are heavy topical sunblock users – are encouraged to consider taking 1,000 IU of vitamin D daily all year-round.

Vitamin D supplements from Jamieson Laboratories are made using only Quali[®]-D. Fully traceable from farm to finish, Quali[®]-D is the world's purest Vitamin D₃ and the same form that the body naturally produces when skin is exposed to sunlight.

Quali[®]-D is derived from the world's finest lanolin, an abundant, rich and renewable source of Vitamin D. The lanolin is extracted from the sun-drenched wool of sheep living in the high country of Australia and New Zealand and then shipped to France, where it undergoes sophisticated, state-of-the-art processing to yield an exceptionally pure, crystalline form of pre-Vitamin D₃. Exposure to ultraviolet light — the same mechanism that allows the body to naturally synthesize Vitamin D — activates the pre-Vitamin D and converts it to a pharmaceutical-grade Vitamin D₃. This premium finished product, known as Quali[®]-D, is an allergen-, animal- and GMO-free vitamin D₃, manufactured without any animal testing.

Jamieson's Chewable Vitamin D₃ 1,000 IU is formulated from natural sources and is pharmaceutically tested to guarantee full potency and absolute clinical purity.

What makes Chewable Vitamin D₃ 1,000 IU from Jamieson Laboratories different...and why does this difference mean better?

- 1) Formulated with Quali[®]-D, the world's premium, natural vitamin D₃. Fully sustainable, and traceable from farm to finish without animal testing.

For Accidental Overdose (such as child ingesting formula)
Dial 911, 0 for operator assistance or call your nearest Poison Control Centre.

For Professional Use Only
The information contained here has been accumulated from many sources.
Indications are not intended as cures, they are simply a guideline to be used at your professional discretion.



- 2) Formulated with Vitamin D₃. This is the same form that is naturally produced in the body during exposure to sunlight, and is more bioavailable than vitamin D₂.
- 3) The first and only flavoured chewable vitamin D product on the market.
- 4) Made using a delicious natural chocolate flavour and natural colours.
- 5) Great-tasting, easy-to-chew tablets are a good option for individuals that dislike or prefer not to swallow pills.
- 6) Our premium formulations are manufactured using the 360 Pure process - a minimum of 360 quality tests that guarantee traceability and reliability of raw material, product safety, full potency and absolute clinical purity.

INGREDIENT INFORMATION

Available as 100 tablets.
 Each tablet contains:
 Vitamin D₃ (cholecalciferol).....25 mcg/1,000 IU

EXCIPIENTS

Dextrose, Cellulose, Vegetable Stearic Acid, Natural Chocolate Flavour, Vegetable Magnesium Stearate, Silica, Sucralose.

NUTRITIONAL INFORMATION

	Per 1 Chewable Tablet
Calories	2.67 cal
Calories from fat	0.14 cal
Total Fat	0.02 g
Saturated	0.01 g
Trans Fatty Acids	0 g
Cholesterol	0 g
Sodium	0.06 mg
Carbohydrates	0.62 g
Fibre	0.01 g
Sugar	0.51 g
Protein	0.01 g

DIRECTIONS

Adults: Chew one tablet daily. Store between 15°-25°C away from children.

INDICATED BENEFITS

- Essential for normal development and maintenance of bones and teeth
- Helps in the absorption and use of calcium and phosphorus
- Helps prevent vitamin D deficiency

NUTRIENT INTERACTIONS

Drug Interactions

Anti-coagulant drugs, Calcium Channel Blockers, Magnesium-containing Antacids, Orlistat.

Nutrient Depletions

Corticosteroids, Anti-Asthmatic Drugs/ Bronchodilators, Anti-cholesterol Drugs/HMG-CoA Reductase Inhibitors, Anti-tuberculosis drugs, Histamine (H₂) blocking drugs, Progestins.

Supportive Interactions

Vitamin D works with calcium to maintain strong, healthy bones and teeth.

WARNINGS AND PRECAUTIONS

None known when taken as directed.

TOXICITY, ADVERSE REACTIONS, AND SIDE EFFECTS

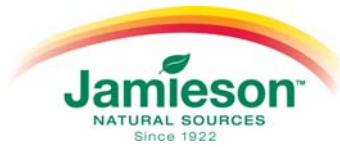
Do not exceed the recommended dosage. Taking too much vitamin D can cause non-specific symptoms such as diarrhea, constipation, headache, poor appetite, weight loss, nausea, vomiting and extreme fatigue.

Excess vitamin D can also increase blood levels of calcium (hypercalcemia), potentially causing heartbeat irregularities and deposition of calcium and phosphate in the kidneys and soft tissues (i.e. muscles).

For Accidental Overdose (such as child ingesting formula)
 Dial 911, 0 for operator assistance or call your nearest Poison Control Centre.

For Professional Use Only

The information contained here has been accumulated from many sources.
 Indications are not intended as cures, they are simply a guideline to be used at your professional discretion.



REFERENCES

1. Armas, L.A., Hollis B.W., Heaney, R.P. (2004). Vitamin D₂ Is Much Less Effective than Vitamin D₃ in Humans. *The Journal of Clinical Endocrinology & Metabolism*, 89(11): 5387-539.
2. Mistretta, V.I., Delanaye, P., Chapelle, J.P., Souberbielle, C., Cavalier, E. (2008). Vitamin D₂ or vitamin D₃? *Rev Med Interne*, 29(10):815-20.
3. Shils, M.E., Olson, J.A., Shike, M., Ross, A.C., editors. (2006). *Modern Nutrition in Health and Disease*, 10th edition. Philadelphia (PA): Lippincott Williams and Wilkins.
4. Lappe, J.M., Travers-Gustafson, D., Davies, K.M., Recker, R.R., Heaney, R.P. (2007). Vitamin D and calcium supplementation reduces cancer risk: results of a randomized trial. *Am J Clin Nutr*, 85(6): 586-91.
5. Garland, C.F., Garland, F.C., Gorham, E.D., Lipkin, M., Newmark, H., Mohr, S.B., Holick, M.F. (2006). The role of vitamin D in cancer prevention. *Am J Pub Health*, 96(2): 252-61.
6. Gorham, E.D., Garland, C.F., Garland, F.C., Grant, W.B., Mohr, S.B., Lipkin, M., Newmark, H.L. Giovannucci, E., Wei, M., Holick, M.F. (2005). Vitamin D and the prevention of colorectal cancer. *J Steroid Biochem Mol Biol*, 97(1-2): 179-194.

For Accidental Overdose (such as child ingesting formula)
Dial 911, 0 for operator assistance or call your nearest Poison Control Centre.

For Professional Use Only
The information contained here has been accumulated from many sources.
Indications are not intended as cures, they are simply a guideline to be used at your professional discretion.