

# MK7 (K2)wmD3 Drops

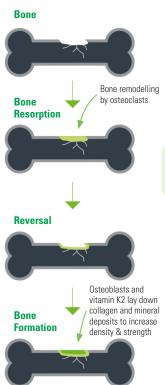
The most concentrated MK7 and D3 per drop!



#### Vitamin K2

Vitamin K is a fat-soluble vitamin. It is well known for its role in heart health, producing prothrombin necessary for blood clotting and preventing calcium build-up in the arteries. Vitamin K helps convert glucose into glycogen for storage in the liver and is essential for the formation, repair, and maintenance of healthy bones. Vitamin K2 as MK7 (menaquinone-7) is the most stable form and stays in the body longer than other vitamin K.

#### **Bone Metabolism**



## MK7 K2: Building Strong Bones

The bone matrix contains osteoclasts (breakdown old and damaged bone tissue) and osteoblasts (bone building) that are responsible for breaking down and rebuilding healthy bones. Once osteoclasts remove damaged and old bone, the osteoblasts secrete the protein osteocalcin into the blood. Osteocalcin is activated by vitamin K2 and binds to calcium, transporting calcium from the blood to the bone. Osteoblasts then integrate the calcium into the bone matrix, working to increase bone strength and mineral density.

Every seven years, bone remodelling replaces all the bones in your entire body!

#### MK7 Vit K2: Cardiovascular Health

Vitamin K2 in the form of MK7 regulates the transportation and distribution of calcium in the entire body. Through the activation of specific carboxylated proteins, calcium is moved from the blood and bound into the bone matrix, thus helping to prevent calcium from building up and forming plaques in the arteries (a risk factor for heart disease).





## Why Supplement with a Combination of MK7 K2 + D3?

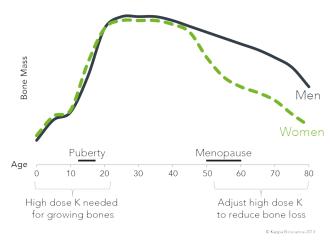
Vitamins K2 and D3 work synergistically to maintain bone health by enhancing calcium absorption into the bone matrix.<sup>11,12,18,21</sup> Vitamin K2 allows the calcium in the bloodstream to be utilized for bone building. It transports excess calcium from the arteries and blood into the bone, where vitamin D3 helps absorption and binding the calcium into the bone matrix.

## Risk Factors for Vitamin K Deficiency:

Vitamin K deficiency is rare as the body makes K2 in the intestines. The main symptoms of deficiency include easily bruising and excessive bleeding.

- ► Taking prescriptions including anticoagulants and antibiotics
- ► Condition causing fat malabsorption (celiac disease, cystic fibrosis)
- ▶ Disorder of the biliary tract (liver, gallbladder, bile ducts)
- Breastfeed infants

#### Vitamin K2 MK-7 Supports Strong Bones



**Figure 1**. Peak bone mass is reached around the age of 20, where it naturally begins to decline. Over time, this results in age-related loss of bone mineral density and leads to brittle bones and osteoporosis, increasing the risk of fractures.

## Vitamin D Synthesis Sunlight **UV-B Raus** Skin 7-dehydrocholesterol Cholecalciferol (pre vitamin D<sub>3</sub>) Liver D2 & D3 Dietary Intake (Food & Supplements) Calcidiol 25-hudroxuvitamin Da Kidneu

#### Vitamin D3

Vitamin D is a fat-soluble vitamin. It is manufactured in the body and stored in fat cells after the skin is exposed to UV-B rays from direct sunlight. Vitamin D3 is best known for bone health and regulating immune function. In addition, the D3 form is biologically active and ready for use in a wide variety of vital biological processes within the body.

### Vitamin D3: Building Strong Bones

Vitamin D3 is needed for development, growth, and maintenance of strong bones and teeth. It is required for calcium regulation, by promoting absorption of calcium and phosphorus from the small intestine and kidneys to be deposited for in bone mineralization. Additionally, when vitamin D is combined with calcium intake and regular weightbearing exercise, it helps reduce the risk of developing osteoporosis.

Deficiency can be associated with loss of bone density, osteoporosis and 'brittle' bones, lower back pain<sup>1</sup>, and muscle weakness

### Vitamin D3: Healthy Immune Function

Vitamin D3 is required for proper immune function and can modulate both adaptive and innate immune responses. Vitamin D acts to facilitate immune system activity with receptors expressed on immunological cells (B-cells, T-cells and antigen presenting cells)<sup>5</sup>, and can stimulate NK lymphocytes and enhance suppressor T-cells.

Deficiency can be associated with an increased susceptibility to infection, autoimmune disease<sup>2</sup> including MS, and certain types of neoplasia<sup>3</sup>.



**Calcitriol** 1,25-dihydroxyvitamin D₃

Biologically active form of D3

- Calcium metabolism
- ▶ Bone & muscle health
- ▶ Blood pressure
- ▶ Immune function
- ▶ Insulin production
- ▶ Cell growth





## Why Supplement with a Combination of MK7 K2 + D3?

Vitamins K2 and D3 work synergistically to maintain bone health by enhancing calcium absorption into the bone matrix. 11.12.18.21 Vitamin D3 helps absorption and binding of calcium into the bone matrix, where vitamin K2 transports and delivers excess calcium from the arteries and blood to the bones. Through supporting healthy bone, you reduce the risk of developing brittle bones and osteoporosis. 19.20

### Risk Factors for Vitamin D Deficiency:

- Adults 50 years and older<sup>4</sup>
- Pregnancy & breastfed infants
- Limited sun or skin exposure (indoor, clothes)
- ▶ Higher melanin pigment in darker skin tone<sup>5</sup> can block UV-B rays
- Sunscreen use can block up to 98% of UV-B rays<sup>6</sup>
- Season and geographical location
- Cloud cover and pollution
- Intestinal absorption issues

### Why Supplement with Vitamin D3

Over 70% of Canadians are vitamin D deficient<sup>7</sup>, proving that it is difficult to get enough vitamin D from direct sun exposure and food alone. Studies show vitamin D is essential for long-term health and therefore a reliable and consistent source of vitamin D (often through supplementation) is necessary to prevent risk of deficiency. Optimal vitamin D levels are essential for health throughout all ages and stages of life.

Vitamin D requirements change throughout life and according to risk factors8:

- Infants (up to 1 year): 400 IU daily (upper limit 1000 1500 IU)
- Children (1 to 9 years): 600 IU daily (upper limit 2500 3000 IU)
- Pregnancy and lactation: 600 IU daily (upper limit 4000 IU)
- Adults: 800 IU daily (upper limit 4000 IU)

#### **Protocol: Rebuild Bone Density & Osteoporosis**

Improve bone health by increasing bone strength and bone mineral density. The nutrients found in BoneSure, MK7 with D3 Drops, and Basictab increase bone mineral density and reduce the risk of developing osteoporosis.

Osteoporosis (brittle bones) is a condition where there is an impaired metabolism of the inorganic and organic bone mass. According to European Biological Medicine, increased acidification (metabolic acidosis) of the tissues can cause bone cell dysfunction and reduce bone mineral density. The bones serve as the mineral reservoirs in the body, providing a protective function to maintain normal systemic pH levels. When increased acidification occurs, calcium and other minerals from drawn from the bones and muscles to buffer the excess of acid (hydrogen ions), contributing to calcium and mineral loss from the bones.

#### Goals of the Bone Health Protocol:

- 1. Rebalance normal acid-base (pH) levels.
- 2. Reduce bone loss.
- 3. Rebuild bone mineral density.

Remedy	Dose	Daily Directions
BoneSure	2 capsules	two times a day
MK7 w/D3 Drops	1 drop	once a day
Basictab	2 tablets	empty stomach, warm water, two times a day





#### Nutrients to Support Bone Health:

#### BONESURE 9,10,11,12,13,14,15,16,17,18,19,20,21

Recommended dosage (adult): 2 capsules two times daily. Safe to use long term.

BoneSure contains a combination of plant-sourced multi-minerals (from marine algae *Lithothamnion corallioides*), vitamins (C, D, K), boron, and 76 naturally occurring trace elements to provide full-spectrum remineralization and bone health.

- increased collagen formation.
- increase bone mineral density.
- support healthy bone formation.
- reduce the risk of developing osteoporosis.
- improve bone, strength, structure, and function.
- improve bone health in peri-menopausal and menopausal women.

#### MK7 WITH D3 DROPS 11,12,18,19,20,21

**Recommended dosage (adult):** 1 drop once daily. Safe to use long term.

MK7 with Vitamin D3 is a combination of vitamin K2 (MK7, menaquinone 7) and vitamin D3 to maintain bone health and improve calcium absorption and binding into the bone matrix.

- drives calcium into the bone matrix.
- promotes healthy bone mineral density.
- reduce the risk of developing osteoporosis.
- regulates calcium transportation and distribution.
- improve calcium and phosphorus absorption for bone health.

#### **BASICTAB** 22,23,24,25,26,27

**Recommended dosage (adult):** 2 tablets twice daily. Take with warm water on an empty stomach. Use for three to six months.

Addressing the root cause of osteoporosis starts with reversing metabolic acidosis and restoring normal pH levels through alkaline therapy (using NaHCO3 to increase serum bicarbonate levels in the blood), a diet high in alkaline foods, and a reduced protein diet.

- support bone health.
- decrease inflammation.
- rebalance acid-base and tissue pH levels.
- halt the need to draw from the bone mineral reserves to buffer acidosis.



Medicinal ingredients: Each drop (0.028 ml) contains:

Vitamin D3. . . . . . . ..... 1000 IU (25 mcg)

Non-medicinal ingredients: Coconut oil, olive oil, medium chain triglycerides, lemon flavour.

Recommended dose (adults): 1 drop once daily. The drop may be taken directly on the tongue, in food or liquid, or licked from a clean surface such as a spoon or back of a washed hand, or as directed by a health care practitioner.

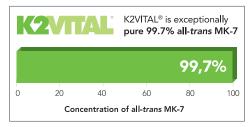
Caution/Warnings: Consult a health care practitioner prior to use if taking blood thinners.

NPN 80082256 • 10 ml drops



#### Benefits of MK7 from K2 Vital:

- ✓ high bioavailability
- ✓ super concentrate dose (1 drop = 25mg K2 + 1000 IU vitamin D)
- ✓ most stable & purest form of vitamin K2 available





Scan OR code for references.



Quality. Excellence. Beyond Medicine."