Vitamin D3

Excipients

Glycine, silica colloidal anhydrous, vegetable capsules

Pack size

60 capsules, 120 capsules

Dosage

1 capsule per day, or as prescribed

Indications

May be useful in conditions involving:
- Immune dysfunction[1] (e.g., autoimmune disorders)
- Poor bone health[2] (e.g., osteoporosis)
- Parathyroid function[3]

Interactions

May interact with calcium channel blockers.[5]

The following medications may increase the body's vitamin D requirements:[5]
- Anti-convulsants (e.g., phenytoin)
- Glucocorticoids

Contraindications

Hypercalcaemia, hyperparathyroidism

* D_3 is derived from lanolin

Formulations

Cholecalciferol (equiv. vitamin D3 1000IU)	25µg
d-Alpha Tocopherol acid Succinate (equiv. vitamin E 10IU)	8.34mg

TECHNICAL INFORMATION

Vitamin D3

Vitamin D is a fat soluble vitamin that can be produced (from cholesterol) in the skin in the presence of ultraviolet radiation. Vitamin D3 (cholecalciferol) is the active metabolite of vitamin D and some consider it to have the actions of a hormone rather than a vitamin. Vitamin D3 can act in a wide variety of tissues including intestine, kidney, bone, muscle, skin and immune cells. Vitamin D may also interact with vitamin D receptors to influence gene transcription.[6]

Immune Modulation

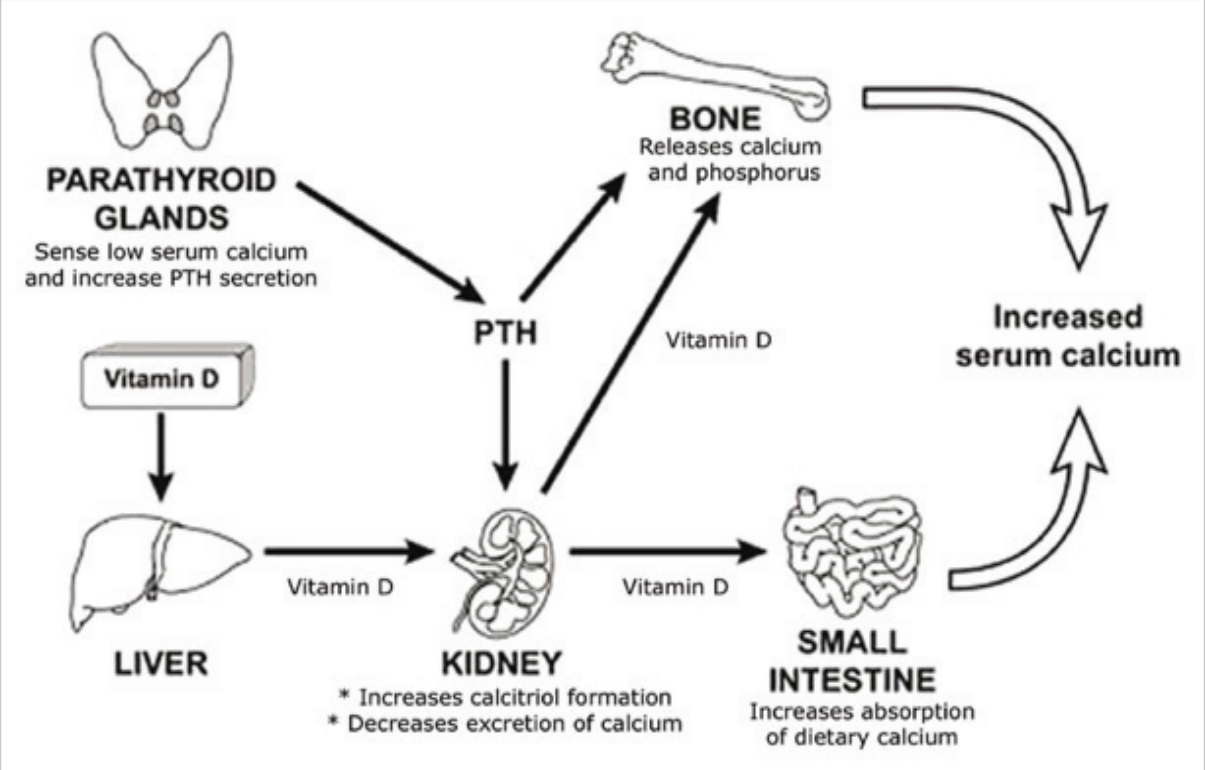
Recent evidence has suggested a role for vitamin D in the treatment of disorders associated with immune dysfunction, in particular autoimmune disorders. [7] Vitamin D receptors are expressed on certain immune cells and activation of these receptors may enhance CD4+ and CD25+ suppressor T cells that, in turn, may inhibit T-helper 1 cell responses, modulating immune responses.[8]

Studies have indicated a protective effect of vitamin D3 on the development of autoimmune disorders such as multiple sclerosis,[9] inflammatory bowel disease,[7] and rheumatoid arthritis.[10]

Bone Health

Vitamin D is heavily involved in the body's absorption and utilisation of calcium making it important for optimal bone health. In a randomised controlled trial, thirty women (mean age = 78 years; range = 58-88) with a proximal humoral fracture, osteoporosis or osteopenia, and not taking any drugs related to bone formation, including calcium or vitamin D supplementation, were randomly assigned to either oral 800 IU vitamin D3 plus 1 g calcium or placebo. The study concluded that there was a positive influence of vitamin D3 and calcium over the first 6 weeks after fracture.[11]

for further information regarding drug/nutrient interactions contact Dr Vera's on 1800 625 934



Parathyroid Function

In conjunction with parathyroid hormone, vitamin D3 can stimulate calcium and phosphorous absorption in the intestines, and reabsorption in the kidneys.[12] It functions to maintain the homeostasis of blood calcium concentrations. Hypocalcaemia can stimulate the secretion of parathyroid hormone from the parathyroid gland. This hormone along with vitamin D3 maintains calcium homeostasis.

References

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