

PACKAGE LEAFLET

D3 Kwizda

Dietary foods for special medical purposes (balanced diets)
For the dietary treatment of vitamin D deficiency

Why is D3 Kwizda taken?

D3 Kwizda is a so-called supplementary balanced diet, which is a special group of dietary food products. These special products make nutrients available to you, which, in the doses supplied, are suitable for the dietary treatment of a disease. In this case, it is vitamin D for the dietary treatment of vitamin D deficiency.

D3 Kwizda selectively provides vitamin D in a quantity that cannot be supplied by normal food.

How is vitamin D produced?

Provitamin D, the precursor of vitamin D, is produced in the skin with the aid of UVB radiation in sunlight. Provitamin D is then transformed into vitamin D (= cholecalciferol) due to the effect of the body's temperature. The vitamin D that is produced in the skin through the influence of UV light, or alternatively is ingested with food, is transported to the liver. In the liver, and finally particularly in the kidneys, vitamin D is transformed into its active form (dihydroxycholecalciferol or calcitriol). In this active form it is able to play its part in metabolism.

What effects of vitamin D have been investigated scientifically?

For a long time it was thought that sufficient vitamin D can be produced by the body, because the body is fundamentally able to produce it under the influence of sunlight. However it is increasingly the case that the quantity of sunlight or the area of skin exposed to sunlight is not sufficient to enable the body to supply itself with sufficient vitamin D. Vitamin D deficiency is increasingly being detected, above all during winter, in bedridden people or in people who are hardly ever out of doors. For this reason, an adequate and regular supply of vitamin D in food is of exceptional importance.

This is because vitamin D is very versatile and makes a valuable contribution to the maintenance and support of the normal functions of bone, the immune system, muscle and cell division:

- An adequate and regular supply of vitamin D3 supports the uptake of calcium from the intestine and contributes to bone mineralisation.
The "assistance" of vitamin D3 is necessary for bone mineralisation. Amongst other things, vitamin D ensures that calcium is taken up efficiently from the intestine and is thus responsible for there being balanced levels of calcium in the blood. This again is a prerequisite for bone mineralisation. To put it simply: the bones need both substances, calcium and also vitamin D3. When one of these substances is lacking, the other cannot fulfil its function on its own.
- New scientific findings have explored the importance of vitamin D for the immune system. Above all, it is the innate immunity, which forms the first line of defence against microorganisms, which is stimulated, nevertheless acquired immunity is also likely to benefit from vitamin D. Vitamin D activates the reactions of the white blood cells in infections and has important functions in the control of cell growth. The calcitriol that is formed from vitamin D3 acts on the immune system and inhibits excessive reactions. Thus, several studies have shown that an improved supply of vitamin D decrease the frequency of respiratory tract diseases and flu-like infections.
- Vitamin D3 contributes to normal muscle function, including that of the heart.

Which groups of people are at increased risk of vitamin D deficiency?

- People, who are overweight
- People, who are not outdoors a lot during the day
- People taking certain medicines, such as cortisone, antidepressants
- Pregnant women, babies, seniors
- People, who use sunscreen (SPF >8)
- People with dark skin pigmentation
- People, who consume excessive alcohol

Which diseases are associated with vitamin D deficiency?

- Rickets
- Muscle weakness
- Heart attack
- Influenza
- Fatigue
- Alzheimer's disease
- Multiple sclerosis
- Cancer
- Diabetes (type 1 & 2)
- Osteoporosis
- Rheumatism
- Stroke
- Flu-like infections
- Depression
- Parkinson's disease
- Hypertension
- Decreased functionality of the locomotor system

Which foods supply vitamin D?

Only certain foods are rich in vitamin D, for example oily fish (salmon, herring and mackerel) as well as egg yolks, and margarine, which is enriched with vitamin D.

If vitamin D deficiency is present, it is difficult to obtain sufficient vitamin D3 from food. To illustrate, in order to obtain 3000 IU (= 75 g) of vitamin D from the diet, you would have to eat 651 g of salmon (tinned) or 6.9 kg of Emmentaler cheese (45% fat content in the dry weight).

Other examples of foods and their vitamin D content:

100 g of cream cheese contains 24 IU vitamin D

100 g yoghurt contains 4 IU vitamin D

100 g of double cream contains 32 IU vitamin D

Dosage and administration:

Take one tablet 1x daily during a meal and with a sufficient quantity of fluid (can be swallowed or chewed)

Ingredients: Filler: **Lactose**, cellulose, release agent: silica, magnesium stearate; carrier: gum arabic; cholecalciferol

Nutrition facts:	per 100 g	per tablet* (recommended daily dose)
Energy	3235 kJ / 773 kcal	3.24 kJ / 0.77 kcal
Fat of which saturated fatty acids	0.7 g 0.7 g	< 0.1 g < 0.1 g
Carbohydrates of which sugar	74 g 40 g	< 0.1 g < 0.1 g
Protein	< 0.1 g	< 0.1 g
Salt	0.26 g	< 0.01 g
Vitamin D	75,000 g (1,500,000 %**)	75 g (1,500 %**)

* Each pack contains 28 tablets.

** of the recommended daily amount according to the nutrient reference value
75 g Vitamin D3 = 3000 IU

According to the D-A-CH Reference Values 2013 3000 IU of vitamin D3 correspond to 375% of the recommended daily dose

Net quantity: 28 round, white tablets with a score line on one side, each 0.1 g (2.8 g total)

Important note

- Supplementary balanced diet, not suitable as a sole source of nourishment.
- Use only under medical supervision.
- Keep away from children.

Store below 25°C.

Only available from pharmacies.

Manufacturer and distributor:

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