Vitamin D Inadequacy Risk Test

Q1 Do you have osteoporosis or osteopenia?

Yes ● No ●

Q2 Are you postmenopausal?

Yes ● No ●

Q2 Do you live in a climate that has frequent cloud cover?

Yes ● No ●

Q4 If you take a vitamin D supplement, do you ever forget to take it?

Yes ● No ●

Q5 Do you consume any of the following foods: - liver, eggs, oily fish, oysters, fortified margarine, milk – less than 3 times per week?

Yes ● No ●

If you have answered yes to one or more of the questions above, you should talk to your doctor about assessing your need for vitamin D supplementation as part of your osteoporosis treatment.

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Age Action IRELAND
For All Older People

MERCK SHARP & DOHME
Ireland (Human Health) Limited

In the 18th and 19th centuries, due to poor diet many inner city children suffered from stunted growth and bowed legs, a direct result of vitamin D deficiency. This situation was essentially eradicated by ensuring that children were exposed to adequate sunlight and given cod liver oil, which is one of the few "foods" rich in vitamin D.

Today, it is the other end of the generational spectrum, postmenopausal women, who may feel the effects of inadequate intake of vitamin D.

Vitamin D is vital to bone health and if you don't get enough, you increase your risk of broken bones caused by osteoporosis.

Yet, despite the essential role of vitamin D in bone health, vitamin D inadequacy is widespread among postmenopausal women with osteoporosis.

Why is vitamin D helpful in treating osteoporosis?

We all know that calcium is important to help build healthy bones. But vitamin D plays a vital role in ensuring that the body can absorb calcium from food and supplements. In other words, without vitamin D, your body cannot unlock the benefit from the calcium you get from foods such as dairy products. Vitamin D is therefore an essential component of osteoporosis treatment.

Who is at risk of vitamin D inadequacy?

Vitamin D inadequacy is widespread in postmenopausal women with osteoporosis regardless of where they live. Many international studies have been done on the benefits of vitamin D and the following are some of the key findings:

- More than 50% of postmenopausal women with osteoporosis have inadequate levels of vitamin D.
- Postmenopausal women with adequate vitamin D levels had up to 65 percent greater calcium absorption.
- Vitamin D – in the presence of calcium – works to help reduce bone loss and fracture risk in people with osteoporosis.
- Vitamin D reduces the risk of fractures by up to 20%, and fractures of the hip, wrist, forearm or spine by up to 30%.
- Vitamin D has been demonstrated to improve muscle strength and reduce body sway, helping to prevent falls in people with, or at risk of, osteoporosis.

What are the sources of vitamin D?

- The main source of vitamin D, also known as the 'sunshine vitamin', is exposure to sunlight.
- Vitamin D is found naturally in only a small number of foods, including egg yolks, liver, oysters and some oily fish.
- Daily multivitamins and supplements.

Exposure to sunlight and natural diets typically do not ensure adequate vitamin D intake. Multivitamins and supplements also often do not provide adequate levels of vitamin D, and may not be taken consistently enough to protect your bones.

Why do postmenopausal women find it difficult to get enough vitamin D?

It can be especially difficult for postmenopausal women to obtain enough vitamin D. Even though the major source of vitamin D is sunlight, the amount of vitamin D produced in the skin varies depending on the time of day, the season, geographic latitude, cloud cover, pollution, clothing, sunscreen and skin pigmentation; the fairer you are, the more vitamin D you make.

Additionally, as people age, their skin becomes less able to convert sunshine into vitamin D and the kidney is less able to convert vitamin D into its active form.

Avoidance of sun exposure by many postmenopausal women – for health and/or beauty reasons – also limits vitamin D production in this population group.

Unlike calcium, vitamin D is not widely available from the diet and those foods that do contain it, typically don't contain enough to help protect your bones.

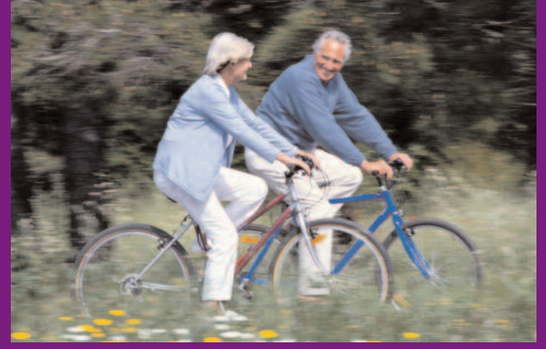
Supplements also often don't contain adequate levels of vitamin D and/or are not taken consistently.

How much vitamin D do you need?

Guidelines in most countries, including European guidelines issued by the Scientific Committee for Food of the Commission of the European Communities, recommend at least 400 IU as the daily dose of vitamin D.

How can you ensure that you are getting enough vitamin D?

Getting adequate vitamin D is particularly important for postmenopausal women with osteoporosis. Vitamin D is an essential component of osteoporosis treatment. Talk to your doctor today about ensuring that your osteoporosis treatment incorporates adequate levels of vitamin D.



Some Common Medical Treatments for Osteoporosis

Bisphosphonates are one of the most commonly prescribed treatments for osteoporosis. They work by decreasing bone turnover, which in turn, increases bone mineral density (BMD), improves strength and helps reduce the risk of fractures including those of the hip and spine. Available in daily, once weekly and monthly formulations. A formulation is also available which combines a bisphosphonate and vitamin D in a once weekly tablet.

Selective Oestrogen Receptor Modulators usually called SERMs, help to maintain bone density and reduce fracture rates, specifically at the spine. Available as a daily tablet.

HRT (Hormone Replacement Therapy) is oestrogen replacement for women at the menopause, which helps maintain bone density and reduce fracture rates.

Strontium is a treatment for postmenopausal osteoporosis to reduce the risk of vertebral and hip fractures. Available in granule sachets for daily administration.

Teriparatide stimulates the formulation of new bone and has been demonstrated to reduce the incidence of vertebral, but not hip, fractures. Available as a daily injection.

Testosterone is an option for men with low levels of testosterone as it may help maintain bone density