



Vitamin D helps to maintain your muscle and bone strength. It also helps your body absorb calcium from food. Vitamin D may also give you protection against developing diseases such as diabetes, heart disease and some types of cancer.

Adults who have vitamin D deficiency do not usually feel any different but in some cases they may have sore or weak muscles or have weakened bones.

In pregnancy, vitamin D also helps to develop your baby's bones. If you have a vitamin D deficiency it can affect the amount of calcium your baby has in their bones. In severe deficiency this can cause a bone deformity called rickets.

How do we get vitamin D

From the sun

Most of our vitamin D is made in our skin by the sun's ultraviolet rays. You are at risk of a vitamin D deficiency if you have too little sunlight exposure. This may happen if you spend a lot of time indoors or cover most of your skin with clothing.

It is important to get enough sunlight to produce vitamin D without increasing your risk of skin cancer. In summer, many fair skinned people make enough vitamin D from having their hands, arms and face (or equivalent area of skin) in the sun for a few minutes each day during normal, day to day outdoor activities. If you are fair skinned it is best to avoid the sun between 11am and 3pm in summer unless you are wearing sun protection.

In winter, in Victoria, you will need two to three hours of sunlight each week.

People with darker skin need more sunlight and those with very black skin may need three to six times as much sunlight as fair skinned people.

From food

While there is vitamin D in some foods, there is not enough to give you what you need. Vitamin D is present in a small number of foods, for the average person food will only supply about 10% of the amount they need. Vitamin D is present in oily fish such as mackerel and sardines and eggs. In Australia it is also added in small amounts to margarine and some brands of milk. Although liver and cod liver oil contain vitamin D, they are not recommended in pregnancy as they also contain too much vitamin A.

Calcium is also needed for bone health in mother and baby. Dairy foods are the richest sources, with two to three serves recommended per day (cheese, milk, yoghurt or calcium-supplemented soy milk).

Testing and treatment for vitamin D deficiency

Mother

Vitamin D levels can be checked with a blood test. Pregnant women who are at risk will be offered a blood test early in pregnancy. If the level is too low, you will be advised to take vitamin D supplements. You should take the amount of supplement prescribed by your doctor or midwife. This amount may change depending on what your blood level is. Sometimes higher doses are needed at first to build your level up. There is no danger of over dose with these amounts.

Oste-Vit D and Ostelin are the most common vitamin D supplements. Both contain the same amount of vitamin D and are suitable for people following the Halal diet.

Baby

If a mother is vitamin D deficient, breast milk is not a good source of vitamin D, so babies need to be given extra vitamin D until they are weaned. Pentavite, which is a liquid multivitamin mixture available from pharmacies, is suitable for this. The dosage is 0.45ml per day. A midwife can show you how to give Pentavite to your baby before you leave the hospital.

After the pregnancy

Women who have had low vitamin D levels during pregnancy are encouraged to continue to take vitamin D supplements after pregnancy to help protect against health problems such as osteoporosis (brittle bones). If you stop taking supplements you should have your level checked from time to time to see if it has stayed in the normal range.

For more information

For general information about your pregnancy see also:

Having your baby at the Women's booklet

Better Health Channel

Rickets fact sheet

<http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Rickets>

Calcium fact sheet

<http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Calcium>