

## Are there any risks if I give my baby too much Vitamin D<sub>3</sub>?

Very high amounts of vitamin D are harmful. The recommended 5 micrograms (5µg) vitamin D a day is very safe for babies. Harmful effects only begin at levels that are five times higher than this recommended dose.

You need to follow the manufacturer's instructions and give the correct dose. If the Vitamin D<sub>3</sub> product is given in the correct amount (according to the manufacturers' instructions) there are no risks to babies. **Giving the correct amount is very important.**

If you forget to give your baby their daily Vitamin D<sub>3</sub>, then start again the next day **but do not give more than one dose per day.**

## Where can I get Vitamin D<sub>3</sub>?

Vitamin D<sub>3</sub> products suitable for babies are food supplements so you don't need a prescription to buy them. These products are not available on the medical card or any other state drug scheme.

You can buy vitamin D<sub>3</sub> products for babies in pharmacies, some supermarkets and other outlets. It is important that you buy products that are suitable for babies, and contain Vitamin D<sub>3</sub> only.

## What is the cost of Vitamin D<sub>3</sub>?

The cost of vitamin D<sub>3</sub> will vary depending on the product. To compare products ask your pharmacist:

- how many doses you will get from a product?
- how long the product will last once open?
- how many bottles are needed for one year?

Depending on the product, you will need to buy more than one bottle in the year.



## Do I need to give my baby other vitamins?

No. The only vitamin we recommend to give all babies is vitamin D<sub>3</sub>. Premature infants or infants who are under on-going medical care may require other vitamins or a higher dose of Vitamin D<sub>3</sub>.

**Multivitamin products or higher doses of vitamin D<sub>3</sub> should only be given to your baby on the advice of your baby's doctor, nurse or dietitian.**

## Where can I get further information?

Ask your pharmacist, doctor, nurse or other healthcare professional for more information or visit [www.hse.ie](http://www.hse.ie)

### Medical terms explained

**(1) Rickets:** soft bones in children, causes severe bone deformities such as bowed legs and spine curves.

**(2) Osteomalacia:** A softening of the bones due to a lack of vitamin D or a problem with the body's ability to break down and use this vitamin. It causes soft bones in adults, causes frequent bone fractures from minor injuries, muscle weakness and bone pain.

**Published by:**  
Health Service Executive  
**Publication date:**  
May 2010

**Review date:**  
May 2012  
**Order code:**  
HPM000665

Order further copies on [www.healthpromotion.ie](http://www.healthpromotion.ie) or by contacting your local health promotion department.

 Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

# Vitamin D and your baby

## What you need to know

Whether you choose to breastfeed or formula feed, you should give your baby 5 micrograms (5µg) of vitamin D<sub>3</sub> every day.



 Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

## What is Vitamin D?

Vitamin D is important because it helps our bodies use calcium to build and maintain strong bones and teeth. Children (and adults) in Ireland have low levels of vitamin D which can lead to weak bones.

In severe cases low levels of vitamin D can cause rickets<sup>(1)</sup> in children. There has been an increase in the number of cases of rickets in Ireland in recent years.

Vitamin D is known as the 'sunshine vitamin' because our bodies can make vitamin D from the sun. When sunlight hits our skin, the ultra-violet B (UVB) sun rays are used to make vitamin D. However, it is not possible for babies to safely get the vitamin D they need from the sun.

## Why does my baby need Vitamin D?

Your baby needs vitamin D because:

- their skin is very sensitive to the sun and should not be exposed to direct sunlight;
- their food (breastmilk, formula milk or solid foods) may not have enough Vitamin D in it; and
- between 0-12 months babies grow very quickly and have a greater need for vitamin D to form strong bones.

Babies with African, Afro-Caribbean, Middle-Eastern or Indian ethnic backgrounds are at even higher risk of having low levels of vitamin D. Their stores of vitamin D may be particularly low when born as their mothers' skin may not be as efficient at making vitamin D from the amount and type of sunlight in Ireland.

## I am pregnant and taking Vitamin D – will my baby still need to take Vitamin D after birth?

Yes. All babies need vitamin D because they do not get enough from their food. This includes babies of mothers who took vitamin D while pregnant. Like all babies they will need to take vitamin D everyday to make up for the low level in their food.

## What type of Vitamin D should I give my baby?

Vitamin D<sub>3</sub> (cholecalciferol) is the preferred form of vitamin D for infants. The vitamin D<sub>3</sub> product you use should be in a liquid form suitable for infants and contain only vitamin D<sub>3</sub>. Products that contain other vitamins as well as vitamin D (such as multivitamin products) should **not** be used.

## Why are we being asked to give our babies Vitamin D now?

The evidence is that children and mothers in Ireland have low levels of vitamin D. Low levels of vitamin D leads to weak bones. In severe cases low levels of vitamin D can cause rickets in children and osteomalacia<sup>(2)</sup> in adults. There have been a growing number of cases of rickets diagnosed in Ireland in recent years.

Research is also showing that vitamin D plays an important role in helping the immune system. It may also help prevent illnesses like diabetes, heart disease, rheumatoid arthritis, multiple sclerosis as well as some forms of cancer.

**Recommendation:** To ensure that ALL babies get enough vitamin D they should be given 5 micrograms (5µg) of vitamin D<sub>3</sub> every day from birth to 12 months, whether breastfed or formula fed or taking solid foods.

**The vitamin D product used should contain only Vitamin D<sub>3</sub> and be in a liquid form suitable for infants.**

If your doctor has already prescribed vitamins for your baby you should ask their advice before giving your baby any additional vitamin products.

## What dosage should I give my baby?

The current recommendation is 5 micrograms (5µg) once a day – from birth to 12 months. There are a number of suitable infant vitamin D<sub>3</sub> products available to buy in Ireland. These provide the correct kind of vitamin D<sub>3</sub>. A list of these products can be found on [www.hse.ie](http://www.hse.ie)

**Important:** The number of drops or amount of liquid required to give your baby the recommended 5 micrograms (5µg) daily is different for each product. Read the product instructions carefully and ask your pharmacist, doctor, dietitian or nurse for advice if needed.

Very large doses of vitamin D<sub>3</sub> may make your baby ill. **Only one dose per day should be given.**

## How do I give my baby the Vitamin D?

Check the product label for the number of drops or amount of liquid you need to give your baby. The correct amount is 5 micrograms (5µg). Give your baby the correct dose directly into their mouth.