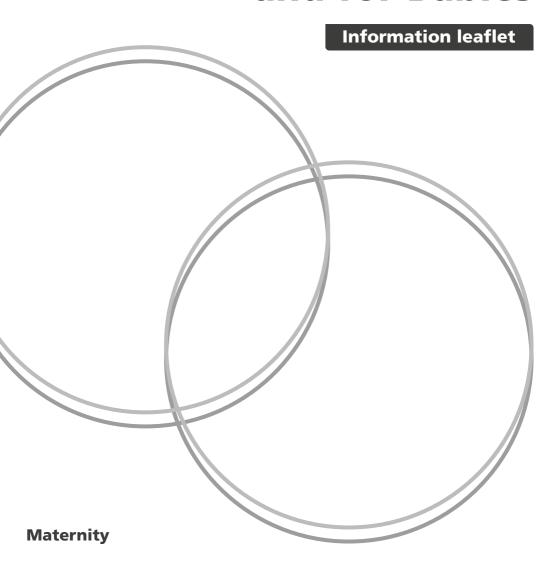


# Vitamin D in Pregnancy and for Babies



This leaflet has been written to help explain the national recommendations on vitamin D supplements for babies.

Gender inclusive language in OUH Maternity and Perinatal Services:

- This leaflet uses the terms woman and birthing person, women and birthing people and mother throughout. These terms should be taken to include all pregnant people. Similarly, where the term parent(s) is used, this should be taken to include anyone who has main responsibility for caring for a baby.
- The term partner refers to the woman or birthing person's chosen supporter. This could be the baby's father, the women or birthing person's partner, a family member or friend, or anyone who the woman or birthing person feels supported by and wishes to involve in their care.

#### What is vitamin D?

Vitamin D is an essential nutrient that helps our bodies use calcium to build and maintain strong bones and teeth.

Our bodies make vitamin D when strong sunlight hits the skin. There isn't much vitamin D in food, including breastmilk.

### Why is vitamin D important?

Low levels of vitamin D can cause weak bones, aches and pains, slow growth, muscle weakness, delayed walking, fits (seizures) and problems with the heart.

The most severe form of vitamin D deficiency is a disease called rickets, where bones are so soft they change shape. This also causes pain and weakness.

### What are the national recommendations?

Public Health England recommends that, as a precaution to help prevent health problems, all breastfed babies from birth up to one year of age should be given a supplement of 8.5 to 10 micrograms (µg) (sometimes shown as 340 to 400 international units (IU)) of vitamin D each day.

Babies who drink 500ml or more of infant formula each day do not need vitamin D supplements. This is because infant formula already has added vitamin D

The National Institute for Health and Care Excellence (NICE) also recommends that all pregnant and breastfeeding women take a vitamin D supplement of at least 10 micrograms (400 units) each day, for their own benefit. Some women are recommended to have a higher dose vitamin D supplement of 25 micrograms (1000 units) as they are at higher risk of having a low vitamin D level. Your midwife or obstetrician may recommend this higher dose if you have:

- A Body Mass Index (BMI) of 30 or more.
- A due date between November and March.
- Non-white skin.
- Low sunlight exposure e.g. housebound, clothing that fully covers their body.
- A higher risk of pre-eclampsia.

We would still recommend that your baby has a vitamin D supplement, even if you are taking vitamin D too.

### Why is a vitamin D supplement recommended?

The whole UK population is at risk of low vitamin D levels, because our sunlight is not strong enough for our skin to make enough vitamin D, particularly in the autumn and winter months (September to April). There has also been a growing number of cases of rickets in recent years.

Your baby needs vitamin D as a supplement because:

- their skin is very sensitive to the sun and should not be exposed to strong sunlight, particularly without sunscreen
- breastmilk, like most other foods, does not contain much vitamin D
- babies grow very quickly and have a high need for vitamin D, to form strong bones.

# Are some babies more likely to get vitamin D deficiency than others?

Some babies are at higher risk of low vitamin D levels, so it is especially important that they receive vitamin D supplements. They include:

- babies with African, Afro-Caribbean, Middle Eastern or Indian ethnic backgrounds (due to darker skin, which absorbs less sunlight)
- babies of mothers and birthing people who wear concealing clothing (preventing sunlight hitting large areas of skin), which means they may be more likely to be deficient in vitamin D during pregnancy and so won't have transferred as much to their baby before they are born
- babies from multiple pregnancies (such as twins) as the mother's or birthing person vitamin D has to be shared between the babies
- babies born in the winter months (September to April)
- babies of mothers or birthing people who are overweight (with a body mass index (BMI) of more than 30), who are more likely to be deficient in vitamin D
- babies of mothers or birthing people who have gestational diabetes or type 2 diabetes, who are also more likely to be deficient in vitamin D
- women and birthing people are screened for their individual chance of having low vitamin D levels during their early pregnancy booking appointment. People identified with a higher chance of having low vitamin D levels at their booking appointment are advised to take vitamin D supplementation throughout pregnancy. If you have any questions about this, please speak to your midwife.

## How do I get vitamin D supplements for the baby?

Vitamin D supplements are sold in pharmacies, supermarkets, other shops and online.

Preparations for babies should be in liquid form. Check that the preparation you are buying can be used for newborn babies and contains the recommended dose (8.5 to 10 micrograms, sometimes shown as 340 to 400 international units).

There is likely to be an increase in the options available, as manufacturers respond to the new national recommendations. The cost of vitamin D will vary, depending on the product and brand. To compare costs, look at how many doses you will get from the bottle and how long the bottle will last once opened.

'Healthy Start' vitamins for children are available free for babies from low-income families (if you are receiving Income Support, Incomebased Jobseeker's Allowance, Income-related Employment and Support Allowance, Child Tax Credit or Universal Credit (if your family take home pay is below the set threshold)). They are also available for sale. They contain vitamin A and C, as well as vitamin D.

Some babies (such as premature babies) may also be prescribed multivitamins, such as Dalivit or Abidec.

Do not give your baby vitamin D supplements as well as multivitamins unless you are told to do so, as this may cause them to have too much vitamin D, which could cause health problems. If you are not sure what to do, check with a neonatal doctor or neonatal nurse whilst you are in hospital, or speak to your GP or pharmacist.

## How do I give vitamin D supplements to the baby?

The number of drops or amount of liquid needed is different for each product and depends on the age of your baby. Read the product instructions carefully and ask your pharmacist for advice if needed.

Liquid forms of vitamin D can be dropped onto the breast (on or next to the nipple) just before a feed, given with a dropper, or on a sterilised spoon with the baby in an upright position. Check the product for instructions on how it can be given. When the baby is old enough, the liquid can be mixed with their food.

### **Further information**

#### **NHS** information

Website: www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d

For information about 'Healthy Start' vitamins, including how to get them visit:

Website: www.healthystart.nhs.uk

We would like to thank the Oxfordshire Maternity and Neonatal Voices Partnership for their contribution in the development of this leaflet

#### **Further information**

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust

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