

1. Introduction and who the guideline applies to:

This guideline is intended for use by Obstetricians and Midwives caring for women in pregnancy and giving advice on the use of Vitamin D during their pregnancy.

Related UHL Documents:

- [Booking Process and Risk Assessment UHL Obstetric Guideline](#)
- [Diabetes in Pregnancy UHL Obstetric Guideline](#)
- [Gestational Diabetes Mellitus \(GDM\) UHL Obstetric Guideline](#)

Background:

Low vitamin D concentrations have been associated with a wide range of adverse maternal and neonatal/child health outcomes such as increased risk of:

Maternal:

- Pre-eclampsia
- Gestational Diabetes Mellitus
- Bacterial vaginosis,
- Increased Caesarean section rate.

Neonatal/child:

- Small for Gestational Age and impaired bone development
- Wheezing and asthma,
- Neonatal seizures (especially common in South Asian women)
(1, 2)

2. Supplementation recommendations:

Daily supplementation should be recommended for all pregnant and lactating women and people*.

- There is no evidence to support routine testing of vitamin D levels in pregnancy.
- All pregnant women and people should be informed at the booking appointment about the importance for their own and their baby's health of maintaining adequate vitamin D stores during pregnancy and whilst breastfeeding.
- Pregnant women and people should be advised to take a vitamin D supplement (10 micrograms / 400 units of vitamin D (colecalciferol) per day, as found in the Healthy Start multivitamin supplement (see 2.1 and 2.2 for guidance on those who may need a higher dose)

- Health professionals must offer the Healthy Start vitamin supplement to all pregnant and breastfeeding people who are not taking supplement elsewhere e.g. own supply from the supermarket/pharmacy or a higher dose prescribed by their obstetrician
- Midwives should enquire at each antenatal contact as to whether pregnant women and people are following advice to take this daily supplement and documented accordingly.

*People who have sarcoidosis, renal disease, inflammatory bowel disease, or any other condition causing fat malabsorption should not take any supplements until advised to do so by a consultant obstetrician

2.1 Increased supplementation

Some women should be advised to take increased supplementation

Women at high risk of a Vitamin D deficiency should be advised to take 25 mcg (1000 units) colecalciferol per day by taking a supplement. They should be prescribed Colecalciferol 1000 units daily by their GP or by the Obstetrician in the Antenatal Clinic. Typically, this can be obtained as an over the counter medicine and does not require a prescription from your GP, women should be advised of this, however, it should still be documented by the GP/Obstetrician that the higher dose is recommended.

People who are recommended to consume the higher dose of 25 mcg (1000 units) colecalciferol per day by taking a supplement are:

- Those who are already aware of their vitamin D deficiency status and therefore already take a higher dose, should be advised to maintain in this pregnancy and breastfeeding as there is no suggestion of adverse outcomes of this higher dose.
- Those who have Type 1 or Type 2 diabetes

NB When prescribing additional vitamin D to a breast-fed child the practitioner should consider the dose of any additional vitamin D given to the mother

2.2 Vitamin D sensitivity or malabsorption

Pregnant women and people with Vitamin D sensitivity or malabsorption should be reviewed by the Obstetrician.

Women with the following should be referred by the GP to an appropriate consultant:

- Women diagnosed with sarcoidosis where there may be Vitamin D sensitivity and Vitamin D may be inappropriate. These women should not be started on any supplement until they have seen the Obstetric Consultant.

- Women diagnosed with a renal disease where Vitamin D supplementation may be ineffective. Women with renal conditions should not be started on any supplement until they have seen the Obstetric Consultant / Renal Physician.

2.3 Vitamin D deficiency:

Women who are deficient in Vitamin D should have an individualised management plan.

A low vitamin D status is defined as a plasma concentration of 25 hydroxyvitamin D of below 30nmol/litre (equal to 10ng/ml). Routine measurement of Vitamin D levels is not required, but may be requested by the GP or Obstetrician when clinical indicated such as when women:

- Have a low calcium concentration
- Suffer from bone pain
- Are diagnosed with gastrointestinal disease
- Are known to abuse alcohol
- Had a previous child with rickets
- Receive medication known to reduce Vitamin D e.g. Orlistat / Phenytoin

3. Training

None

4. Auditable Standards

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
At the booking appointment information and advice on the importance of taking a 10 microgram / 400 unit vitamin D supplement per day during pregnancy and whilst breastfeeding should be given		Consultant Midwife		
Health professionals should offer the Healthy Start vitamin supplement to pregnant women and people who are not sourcing their own supplements from pharmacy/supermarket		Consultant Midwife		
Higher doses of Colecalciferol (Vitamin D3) 25mcg/ 1000 units daily are prescribed in line with local guidance		Consultant Midwife		

5. Supporting References

1. [Vitamin D in pregnancy: A metabolic outlook - PMC \(nih.gov\)](#)
2. [The Association of Vitamin D Levels with Common Pregnancy Complications - PMC \(nih.gov\)](#)

3. [Vitamin D: supplement use in specific population groups | Guidance | NICE 2014](#)
4. NICE guidelines (NG 201): August 2021 [Antenatal care | Guidance | NICE](#)
5. Advisory Committee on Nutrition (2016) Department of Health. London.
6. UK Medicines Information (2016) as per lnwh-tr.medinfo@nhs.net

6. Key Words

Vitamin D, Cholecalciferol, healthy start vitamins

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs. As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT			
Original Author / Lead Officer: C Meijer, Midwife J Austin, Consultant Midwife Helen Hardman Interface Pharmacist L Matthews Clinical Risk and Quality Standards Midwife Guideline Lead: N Archer - Consultant			Executive lead: Chief nurse
REVIEW RECORD			
Date	Issue Number	Reviewed By	Description Of Changes (If Any)
July 2018	V2	As above	Updated in accordance with scientific paper RCOG and the UK Medicines Information evidence review 2016
May 2019	V3	Elaine Broughton and Flo Cox	Inadequacy level changed from 30-50nmol/L to 25-50nmol/L and deficiency is now less than 25 not 30
July 2020	V3.1	Elaine Broughton and Flo Cox	Amendment made to include all BAME women to have vitamin D
July 2022	V4	Emily Wakelin	Format update Reference update
April 2024	V5	Dalvir Kandola and Natasha Archer	Inclusivity update Reference update Amendment made to support universal vitamin D provision in pregnancy Classification of people recommended to take higher doses updated to include those already deficient and Type 1 or Type 2 diabetes only (ethnicity, environmental, hypertension autoimmune disease and BMI >30 removed)

Appendix 1

Healthy Start

Healthy Start is a UK-wide government scheme that provides a 'nutritional safety net' for pregnant women and families on benefits and tax credits.

Women qualify for Healthy Start if they are at least 10 weeks pregnant or have a child under four years old **and** they or their family get:

- Income Support, or
- Income-based Jobseeker's Allowance, or
- Income-related Employment and Support Allowance, or
- Child Tax Credit
- Universal Credit

The daily dose is one tablet, which contains: 10 micrograms of vitamin D

Every eight weeks beneficiaries are sent a green vitamin voucher, which they can swap for one bottle containing 56 tablets of Healthy Start Womens vitamin tablets locally – pick up points can be found on the Healthy Start website.

www.healthystart.nhs.uk

Note: UHL have secured funding to provide Healthy Start Vitamins to all pregnant women/birthing people who are not taking their own supply from the pharmacy/supermarket or are not taking a higher dose prescribed by their Consultant Obstetrician during a pilot phase. Therefore, the information above should be used to support the audit collection as UHL are able to claim back the money used to supply the Healthy Start Vitamins to people who would have qualified through the UK –wide government scheme regardless of the provision through UHL.

Appendix 2

Vitamin D in Pregnancy and Breastfeeding algorithm

