



# Vitamin K for newborn babies

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## Information for women, birthing people, and their families

This leaflet will help you to make a decision regarding the vitamin K supplement and your baby. If possible, read this leaflet before the birth of your baby. You may want to share and discuss the information with your partner and / or family. This will help you to decide whether or not you want your baby to have vitamin K.

We hope the leaflet will help to answer some of the questions you may have. If you have any further questions or concerns, please speak to your midwife or doctor.

### What is vitamin K?

Vitamin K is a vitamin which is found naturally in our bodies. It is also found in some food, such as liver and some vegetables. Vitamin K helps our blood clot, preventing severe bleeding.

### Why is vitamin K being offered to my newborn baby?

Newborn babies are born with low stores of vitamin K in their blood. These stores can quickly be used up over the first few days of life. Some babies are born with very low vitamin K stores. These babies are more vulnerable to severe bleeding (haemorrhage), as their blood will be less able to clot. Those babies are at risk of Vitamin K Deficiency Bleeding (VKDB). This is also known as haemorrhagic disease of the newborn (HDN).

VKDB can almost always be prevented by giving your baby a supplement of vitamin K.

A very small amount of vitamin K is passed to your baby through your placenta. Breastmilk also contains very small amounts of vitamin K. Formula milk has vitamin K added to it. Feeding alone is not enough to significantly improve your baby's vitamin K levels. You will be supported to feed your baby in the first hour after birth and to offer regular feeds. By offering regular feeds, this will slowly help to increase your baby's vitamin K levels.

The Department of Health recommends that all newborn babies should be given a vitamin K supplement at birth.

### What is Vitamin K Deficiency Bleeding (VKDB)?

Vitamin K Deficiency Bleeding (VKDB) is a rare but serious (and sometimes fatal) bleeding disorder. Bleeding typically occurs between day 2 to 7 of life, but it can occur up to 6 months of age. Very rarely bleeding can occur on the first day of life. VKDB can almost always be prevented by giving a supplement of vitamin K.

If no vitamin K supplement is given:

- Vitamin K Deficiency Bleeding (VKDB) occurs in:
  - 1 in 10,000 of all live births.
  - 1 in 8,500 full term (37 to 42 weeks) babies.
- 10 to 20 of the 800,000 babies born each year in the UK, might be brain damaged as a result of a bleed into the brain.
- About 5 babies will die of this condition.

Although the likelihood of a baby having VKDB is very small, the consequences if this happens can be devastating.

### How do I know if my baby is at risk?

All infants can be affected by VKDB. Bleeding happens unpredictably in some babies. It is not always possible for midwives and doctors to identify babies as high or low risk. About 1 in 4 babies who develop VKDB have no risk factors.

### Your baby is more at risk of developing VKDB if:

- they are born prematurely.
- they were born using forceps or kiwi / ventouse (suction cap), or by caesarean birth.
- you had a complicated birth.
- they are unwell for any reason.
- they have liver disease.
- you took anti-seizure, anti-tuberculosis, or anti-coagulant medications during pregnancy.
- they are bruised after birth.
- they are having difficulties breathing at birth.
- you are breastfeeding only, without a vitamin K supplement. Breastfeeding is the healthiest feeding option for your baby.

### What are the benefits of giving vitamin K?

The risk of your baby developing VKDB is almost eliminated if your baby is given a vitamin K supplement shortly after birth. If the appropriate dose is given at the appropriate time, the likelihood of your baby developing VKDB is reduced to 1 in 100,000. This is why the Department of Health recommends that all

babies have a vitamin K supplement when they are born. The most effective treatment is a single dose of vitamin K injected into your baby's thigh muscle shortly after birth.

### Are there any risks to taking vitamin K?

Vitamin K is both safe and effective. **Side effects are very rare and often mild.** They may include:

- signs of redness or swelling at the injection site; or
- an allergic reaction. Symptoms include:
  - swelling of your baby's throat, face, lips, and mouth.
  - swelling of your baby's hands, feet, and ankles.

If your baby has an allergic reaction, tell a doctor straightaway.

### When do I need to decide about vitamin K?

Vitamin K is given soon after birth. Your midwife may have discussed vitamin K with you during your pregnancy. When your baby is born, you will be asked if you would like them to have the vitamin K supplement. You will also have to decide how you want your baby to have the supplement. The preferred method for giving vitamin K is by injection. It can also be given by mouth (orally).

### How is the vitamin K given to my baby?

There are two ways of giving your baby vitamin K.

#### 1. Vitamin K by injection (IM) - 1mg

- The most effective treatment is a single dose injection of vitamin K.
- The injection is given into your baby's thigh muscle (IM).
- If your baby is in the Neonatal Unit, the injection will be given shortly after birth by a midwife or nurse.
- Your baby will only need to have this injection once. In rare cases, where there are clinical concerns about a baby's clotting ability, a repeat dose may be given.
- Levels of vitamin K will remain higher for longer when given by injection. This is because it remains stored in the muscle, where it is injected.
- Your baby may experience some pain and a little bleeding at the injection site. You may wish to feed your baby during this injection, to help with pain relief. Please let your midwife know if you wish to do this.
- The risk of VKDB is almost completely removed with vitamin K IM.
- Doses will be adjusted by a doctor if your baby weighs less than 2.5kg (approximately 5lb 8oz).
- You will be told if your baby should not have an injection of vitamin K for any reason.

## 2. Vitamin K by mouth (orally) - 2mg.

- Vitamin K can also be given by mouth (orally).
- Vitamin K by mouth may not work in a small number of babies.
- It is effective in most cases, when all doses are given and are absorbed by your baby.
- Doses must be repeated, as absorption is not reliable.
  - 1st dose will be given by your midwife shortly after birth.
  - 2nd dose will be given by your midwife when your baby is between 4 and 7 days old.
  - 3rd dose is given between 4 and 6 weeks of age. It is important that you give your baby this dose. **The 3rd dose is not needed if you are only feeding your baby formula**, as vitamin K is added to all formula milk. For more information, please see the **How to give vitamin K by mouth / orally** leaflet.

### What if I decide not to give my baby vitamin K?

As a parent it is your choice if your baby receives vitamin K or not. If you decide against it, it is very important to be aware of the risk of VKDB. You must also be aware that there may be no warning signs even though VKDB is rare.

### Signs of bleeding

You should ask for medical help immediately if your baby has any of the following.

- Oozing of blood from the umbilical stump or any injection sites.
- Unexplained or severe skin bruising.
- Nose bleeds, vomiting blood, blood in stools (poo), or black tarry stool (not meconium).
- Skin is pale in colour.
- Jaundice (yellow eyes and skin) after the first 2 weeks (term babies) or 3 weeks (premature babies).
- Irritability, seizures, excessive sleepiness, or repeated vomiting.

VKDB can cause bleeding within the brain without any warning, which can lead to brain damage or death.

If your baby is later considered to be at high risk of VKDB, your doctor may prescribe the vitamin K injection.

### What if my baby is admitted to the Neonatal Unit?

If your baby is admitted to the Neonatal Unit they will routinely be given vitamin K by injection. This is because they are unwell, and may have an increased risk of bleeding. Vitamin K is therefore given in the best interest of your baby. If you have any questions or concerns about this, please speak to your midwife or paediatrician (specialist baby doctor).

### What if my baby is born prematurely?

For babies born prematurely, the first vitamin K injection may not last long enough. Your baby's doctor may prescribe a vitamin K oral supplement (NeoKay drops) for 3 months after they are discharged from hospital. This will depend on:

- how prematurely your baby was born; and
- if you are only breastfeeding your baby. Breastfeeding is the healthiest feeding option for your baby.

If this is recommended for your baby, their doctor will discuss this with you. In this case, a bottle of NeoKay drops along with instructions for its use will be given to you before discharge from hospital.

### What if my baby needs a surgical procedure? For example, a tongue-tie release (frenulotomy).

Before an appointment can be booked for a surgical procedure, your baby must have:

- had the vitamin K injection; or
- completed the course of oral vitamin K.

This will reduce their risk of bleeding. If you have any questions, please speak with your midwife or doctor.

### What if I change my mind?

You are able to change your mind at any time. If you decided against giving vitamin K or you chose to give your baby vitamin K by mouth (orally), you can ask for it to be given by injection instead. Speak to your midwife or doctor if you have questions about this.

### Are there any alternatives?

Vitamin K is prepared from an animal derived bovine (cow) source.

If you have reasons why you would not wish your baby to receive vitamin K we are unable to offer an alternative. Unfortunately, there is no other licensed product available.

If you choose not to give your baby vitamin K, you need to monitor your baby very closely for signs of VKDB.

### Who can I contact if I have any concerns?

Contact our Maternity Triage service on 01227 206737 for help and advice.

**Always ask for urgent medical attention if you suspect your baby is unwell.**

### Further information

- East Kent Hospitals. How to give Vitamin K by mouth. ([/how-to-give-vitamin-k-by-mouth-orally](#))

- NHS. What happens straight after the birth? (<https://www.nhs.uk/pregnancy/labour-and-birth/after-the-birth/what-happens-straight-after/>)

## References

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- Shah PS, Torgalkar R, Shah VS. Breastfeeding or breast milk for procedural pain in neonates. Cochrane Database of Systematic reviews. 29 August 2023. (<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004950.pub4/full>)

**This leaflet has been produced with and for patients.**

### **Please let us know:**

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

### **You can let us know this by:**

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

**Any complaints, comments, concerns or compliments**, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email ([ekh-tr.pals@nhs.net](mailto:ekh-tr.pals@nhs.net)).

**Patients should not bring large sums of money or valuables into hospital.** Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

**Further patient information leaflets** are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

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