

# Vitamin K

Information for parents



Leeds  
Maternity Care

Vitamin K is also called Konakion MM or Phytomenadione. The Department of Health and NICE recommends all babies receive a Vitamin K supplement when born. This information leaflet is to provide you with the facts as to why the administration of vitamin K is so vital for your newborn baby.

## **What is Vitamin K?**

Vitamin K is a vitamin which occurs naturally in food we eat and is produced in our intestines by 'friendly' bacteria. It helps to make blood clot properly to prevent bleeding (haemorrhage). If the blood cannot clot effectively bleeding could occur.

## **Vitamin K deficient bleeding**

This is a rare condition that can occur because newborn babies do not have sufficient Vitamin K in their body and occasionally start to bleed. This is called Vitamin K Deficiency Bleeding (VKDB) in newborn babies.

Vitamin K deficiency occurs because of poor placental transfer, the absence of Vitamin K producing bacteria in the sterile fetal (and early neonatal) gut, and due to liver immaturity. In a small number of cases the initial low level of vitamin K can leave a baby vulnerable to vitamin K deficiency bleeding. Breast milk has low levels of Vitamin K and therefore does not provide sufficient Vitamin K for the newborn baby's needs. VKDB can occur up to 6 months of age. Giving vitamin K at birth is the best way to prevent low levels of vitamin K and vitamin K deficiency bleeding.

**If your baby develops VKDB in the first few months, they may have obvious bleeding:**

- from their umbilical stump
- in their urine
- from their bottom
- from their skin and mucous membranes, for example, the nose and gums, appearing as bruises on the skin.
- there is also a risk of internal bleeding which parents could be unaware of, for example, inside the head.

The risk of Vitamin K deficient bleeding occurring is approximately one in 10,000 full term babies if they do not get extra Vitamin K. This risk is reduced to about 1 in a million by giving Vitamin K.



## Which babies are at risk?

All babies are at risk of Vitamin K deficient bleeding if they do not receive Vitamin K; however, for some the risk is greater.

- Those who are premature (born before 37 weeks of pregnancy).
- Those who are ill in the newborn period.
- Those who are born by forceps or ventouse.
- Those who are failing to take or absorb feeds.
- Those who have underlying liver disease that may show as jaundice lasting more than 2 weeks.
- VKDB in the first 24 hours after birth is also more common in mothers on certain drugs, such as anti-convulsants, and some anticoagulant therapy, or drugs to treat tuberculosis.
- Bleeding happens unpredictably in some babies and it is not possible to identify which babies will be at risk with absolute certainty. Of the babies who suffer bleeding, about a quarter have no evident risk factor.

## What do we recommend at Leeds Teaching Hospitals?

We strongly advise all newborn babies born in Leeds are given Vitamin K. We recommend that Vitamin K is given by injection. Research has shown that this is the most effective way to prevent Vitamin K deficient bleeding.

A small volume of Vitamin K is injected into the thigh muscle after birth. If given by injection, your baby only needs one dose of Vitamin K.

**Alternatively, Vitamin K can be given by mouth which requires three doses:**

- the first dose soon after birth
- a second dose when your baby is around seven days old (given by parents), and
- a third dose when your baby is about six weeks old (given by parents).

If you are bottle-feeding your baby formula milk, they will only need the first two doses, as vitamin K is added to all formula milk. The reason the baby will require more doses, if given by mouth, is that the baby's digestive system does not absorb the Vitamin K as effectively as when it is given by injection. For this reason, there is a slightly increased risk with the oral route that the baby will develop Vitamin K deficient bleeding.



**Please note:** other forms of oral Vitamin K are available (capsules). We do not currently issue these from Leeds Teaching Hospitals. If you are given oral Vitamin K by your GP or other healthcare providers, it is important to follow the instructions on the packet as the frequency may differ from the advice above.

## Side effects

There are few known side-effects from Vitamin K. Like any medicine there is a small risk of an allergic reaction. There is a small chance of redness, pain or swelling around the injection site. If you have any questions, please talk to your midwife. We greatly feel that the benefits of treatment strongly outweigh the exceedingly small risk of side-effects.

In the early 1990s it was suggested that vitamin K injections might increase the risk of leukaemia (a type of cancer of the blood) in children, however, there have been many more reports disproving this. Current well-informed scientific opinion is that there is no link.

## Does my baby have to be given vitamin K?

As a parent you have the right to refuse. However, we strongly encourage you to allow your baby to have this simple treatment. If you do not wish your baby to have vitamin K, please discuss this with your midwife or doctor to get further information before making your decision.



## Where can I get more information?

If you have any questions regarding Vitamin K, then please ask your midwife or doctor.

### Further Information may be obtained from:

#### Community Midwives Office

0113 206 5329 / 0113 206 6241

#### Department of Health

[www.dh.gov.uk](http://www.dh.gov.uk)

#### NHS Choices

[www.nhs.uk/mypregnancy](http://www.nhs.uk/mypregnancy)

#### National Institute for Health & Clinical Excellence

[www.nice.org.uk](http://www.nice.org.uk)

#### National Childbirth Trust

[www.nctpregnancyandbabycare.com/](http://www.nctpregnancyandbabycare.com/)



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