The Department of Health recommends that all babies are given a vitamin K supplement at birth. This leaflet explains why.

What is vitamin K?
Vitamin K is a vitamin which occurs naturally in food such as green leafy vegetables, some oils such as olive oil and is made by bacteria in our large intestine. Vitamin K is required for the blood to clot properly preventing abnormal bleeding.

Newborn babies commonly do not have enough vitamin K because very little is passed to the baby in the womb from its mother, breast milk only contains small amounts of vitamin K and bacterial production in the gut takes some time to be established.

A small number of babies may bleed due to vitamin K deficiency. This is called haemorrhagic disease of the newborn (HDN). This risk of bleeding is effectively removed when sufficient extra vitamin K is given to babies.

Haemorrhagic disease of the newborn is a disorder which occurs almost exclusively in babies who are not given vitamin K at birth. Bleeding may occur at any time for several weeks after birth. Early signs of HDN may be blood loss from the umbilicus or the gut. Rarely bleeding is more serious, the greatest concern being bleeding into the brain which can lead to brain damage or even death.

What’s the risk?
Between 2.5 and 17 out of every 1,000 babies who do not receive vitamin K will have some bleeding but the risk of serious bleeding is small. About 1 in 10,000 babies who do not receive vitamin K will bleed into their brain, about a third of these will suffer serious permanent brain injury or die.
This risk is virtually eliminated when your baby is given a vitamin K supplement in sufficient amounts.

**Why give vitamin K to all babies?**

Although there are groups of babies who are particularly at risk of bleeding, it is not possible to identify babies as high or low risk with absolute certainty. The range of risk factors is broad but in some babies without risk factors, bleeding occurs for unknown reasons in the first few weeks of life and of babies who suffer bleeding about a quarter have no previous risk factor.

**Which babies are at greatest risk?**

- Babies born prematurely
- Babies who have had a complicated delivery e.g. a forceps delivery
- Babies requiring surgery
- Babies who are ill for other reasons
- Babies of mothers taking certain drugs, particularly some anti-convulsants
- Those who fail to take or find it hard to absorb feeds
- Those having bleeding or spontaneous bruising in early infancy
- Babies with liver disease, this may present as prolonged jaundice, pale stools or dark urine.

**Can vitamin K be harmful?**

Concerns about a possible link between the use of injected vitamin K and childhood cancer were raised by a study in the early 1990s. Several large studies have examined this issue. A review of data from the UK Children’s Cancer Study Group in 2003 found no evidence that neonatal vitamin K administration, irrespective of route, influences the risk of children developing leukaemia or any other cancer.

**How is vitamin K given?**

Vitamin K is usually given by intramuscular injection. This provides the most reliable and long-lasting protection. Vitamin K given orally requires three doses usually given at birth, one week and one month of age.

The Department of Health recommends that if you choose to have doses of vitamin K by mouth for your baby, you need to be aware of the necessity for further doses at the agreed times. These may need to be given by your healthcare professional and it is important that you can be available for these to be given.
Recognising the warning signs of HDN
Many babies who later suffer bleeding in the brain have had prior minor bleeds from the skin, nose or mouth. Any baby with unexplained bleeding or bruising requires urgent medical assessment.

Any baby who is still jaundiced after two weeks of age must be seen by a doctor or health visitor. This is particularly concerning if they are not gaining weight properly, have pale stools and dark urine, or are ill in any way.

If you have any questions or concerns relating to vitamin K, please do not hesitate to discuss it with your midwife or doctor.

Contact details
Direct tel
020 7380 9400

Website
www.uclh.nhs.uk

Where can I get more information?
Please speak to your midwife or doctor. If you need a large print, audio or translated copy of this document, please contact us on 0845 155 5000 ext. 9719. We will try our best to meet your needs.