Vitamin K

What is vitamin K?
Vitamin K is a substance which the body needs for blood clotting. Newborn babies have low levels of vitamin K. This puts them at risk of a rare but serious and potentially life threatening condition known as vitamin K deficiency bleeding.

What are the risks of vitamin K deficiency bleeding?
Vitamin K deficiency bleeding may cause bleeding from the nose, mouth or into the brain. It may not be possible to see the bleeding. Bleeding into the brain may cause brain damage or even death.

Which babies are at greater risk?
Bleeding in the first 24 hours of life is a particular risk to babies of mothers on certain drugs, such as anti-convulsants or anti-tuberculosis therapy.

Bleeding after 24 hours is more common and babies at greater risk are those who:
• are premature
• had an instrumental delivery (forceps or ventouse)
• are sick infants who are not feeding
• have had surgery
• have liver disease that may show as prolonged jaundice, pale stools or dark urine
• mothers with cholestatic liver disease (liver disorders)
• have bleeding or spontaneous bruising in the newborn

However, bleeding can still occur in babies with none of the above risk factors.

Could vitamin K be harmful?
A paper from the UK Childhood Cancer Study concluded that “there is no convincing evidence that neonatal vitamin K administration, irrespective of the route by which it is given, influences the risk of children developing leukaemia or any other cancer” (Fear et al 2003)

What are the latest recommendations on vitamin K?
The Department of Health continues to recommend that all babies should receive vitamin K at birth.

How can vitamin K be given?
There are two methods of giving vitamin K to your baby – by injection or by mouth. It is recommended that babies with additional risk factors should receive vitamin K by injection.

• By injection
One intramuscular injection of vitamin K soon after birth prevents vitamin K deficiency bleeding in virtually all babies.

• By mouth
Vitamin K can also be given by mouth. However, this is not quite so effective and repeat doses are needed later on to protect against late onset bleeding.

For exclusively breastfed babies, three doses are necessary:
  o At birth
  o At 7-10 days
  o At one month

For bottle fed babies, two doses are necessary:
  o At birth
  o At 7-10 days

This is because bottled milk contains added vitamin K.

Breast milk is still the ideal food for your baby because of its many other benefits to your baby’s health.
If your baby needs to be admitted to the Neonatal Unit, it is recommended that vitamin K be given by intramuscular injection.

**What happens if I decide that my baby should not receive vitamin K?**
In these circumstances the risk of bleeding is increased and you should be aware of the warning signs of vitamin K deficiency bleeding and seek medical advice immediately.

**Warning signs**
Many babies who suffer bleeding in the brain have had prior minor bleeds from the skin, nose or mouth. You should seek advice urgently if your baby has any minor bleeds or bruising in the first six months.

Any baby who is still jaundiced two weeks after birth must be seen by a doctor or health visitor, especially if they are not gaining weight properly, have pale stools and dark urine or are unwell.

**When do I decide whether my baby should have vitamin K?**
Your midwife will discuss this with you during pregnancy and record your decision in your notes. The midwife who attends you in labour will confirm your wishes at the time.

**Further information**
National Childbirth Trust www.nct.org.uk  Helpline 0300 3300770

**Reference:**
Fear N et al 2003 Vitamin K and childhood cancer: a report from the United Kingdom Childhood Cancer Study British Journal of Cancer 89 P 1228-1231

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