

## Vitamin K for your baby

Pregnancy is a time of choices and decisions. In order to help you decide what is right for you, you need information about any potential advantages or disadvantages that there might be in the options available.



This leaflet is based on research to help you make your own choice

## What is vitamin K?

**Vitamin K is a substance that is naturally present in the body. It plays an important part in helping blood to clot, for example after someone cuts themselves, vitamin K helps the blood to form a clot, which stops the bleeding and allows the skin to start healing.**

At birth, a baby has very low stores of vitamin K and these are quickly used up over the first few days of life. This leaves babies vulnerable to severe bleeding (haemorrhage) because they are less able to form blood clots and can develop a condition called vitamin K deficiency bleeding (VKDB). This is a rare condition that affects 1 in 10,000 babies, but if it occurs there may be serious consequences. The government currently recommends that vitamin K should be offered to all babies soon after birth, so that the levels of vitamin K are increased for the first few weeks of life to protect the baby against this disorder.

## More about VKDB

Vitamin K deficiency bleeding (VKDB) occurs in the first six to eight months of life. A baby who develops this may have signs of bruising where there has been no cause, or might bleed from their umbilical cord or their nose. The condition can occur within 24 hours (early onset), within the first week of birth (classical onset), or from the first week and for up to six to eight months (late onset). It is most common for the condition to occur within the first week and once it is recognised,

treatment is usually effective. Late onset is more likely to be associated with liver disease or malabsorption. Late onset is also more common in exclusively breastfed babies, because infant formula contains supplements of vitamin K. If a baby is severely affected their major organs can be involved and this can result in long term brain damage or death.

## Which babies are more likely to develop this condition?

Some babies are thought to be more at risk of developing VKDB. These include babies that are born early, those who are born by forceps or ventouse (vacuum extraction) delivery where bruising occurs, and those babies whose mothers needed medication during pregnancy, the most common being treatment for epilepsy.

## How do I decide whether to agree to vitamin K – do I have a choice?

Since 1998 the Department of Health has recommended that all babies receive vitamin K as soon as possible after they have been born. Currently, this can be by one injection or by two or three doses of oral medicine. Your midwife or doctor will give you information to read about vitamin K, which will include why it is being offered to your baby, and how it can be given. Your health professional will be able to answer any questions you might still have after reading through the literature. It is important that you

understand that although the government has made this recommendation, you have a choice as to whether or not your baby receives vitamin K and the method used to give it.

## How is it given?

Vitamin K can be given as a single injection into the muscle at the top of the baby's leg (intramuscular/IM) soon after birth. It can also be given as a liquid medicine which is dropped into the baby's mouth. This is usually given in three doses, the first soon after birth and then when the baby is a week and then a month old.

## How do I decide which method to choose?

A very important aspect in helping you make your decision is having all this information before the baby is born. In that way, you will be more able to see the issues clearly with regard to your baby's risk of developing VKDB. This is probably one of the first decisions you will make as new parents and it will reinforce what responsibilities are placed on you in this role. The following points may help you decide.

- All babies are born with very low levels of vitamin K and although these levels rise over time, without a supplement of vitamin K they are vulnerable to the condition called VKDB.
- Receiving vitamin K as an injection is more effective protection against VKDB in the first few weeks of life than the oral medicine.
- It is likely that the injection will hurt your baby for a short period of time and this can be upsetting for you. Problems from the injection itself are quite rare but they can occur.
- If you choose for your baby to have the oral medicine, it is essential that the baby has all of the doses and takes all of the medicine for it to be effective. Babies do not like the taste very much, so this needs to be given carefully to ensure they swallow all of the dose. If this is done, your baby will be just as well protected as a baby who receives the IM dose.
- If you have any of the risk factors explained above, it is likely that your midwife or doctor will recommend your baby receives IM vitamin K, but the choice of method is still yours.
- A baby who is fully or totally breastfed is more vulnerable because they are not receiving the extra supplement of vitamin K that is present in formula milk.
- The possible link between IM vitamin K and the development of cancer in childhood has been shown to be very unlikely.



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## And yet more things to think about...

If by now, you have more or less decided what decision you will make, these last few points will probably not affect you. However, if you are still undecided, these may help.

- If you feel you do not want your baby to have vitamin K in any form, you will be given information about the signs associated with the development of VKDB so that you can call for advice at any time if you are worried.
- If you are a vegetarian or vegan, you can ask for a product that is not derived from animals.
- It is possible that you can increase your baby's vitamin K levels by increasing your own intake of vitamin K. This can be by an oral supplement or by changes to your diet. Vitamin K is found in liver, olive oil, cow's milk and alfalfa. You may need to seek further advice about this and your midwife should be able to help refer you to someone with more specialist knowledge.

## How to find out more

If you would like to find out more about vitamin K, discuss this leaflet with your midwife or doctor. There is more detailed information available in the professionals' version of this leaflet.

## What we don't know

Although giving three doses of oral vitamin K is reasonably effective, it has been suggested that this might be improved if babies received smaller, regular doses over the first few weeks of life. Further research is needed to test whether this is the case or not.

There is debate among women and health care professionals as to why nature seems to have got it wrong by not producing enough vitamin K to protect the newborn baby against these problems. Some people think we should accept that nature knows best, although it is not clear quite how or why this should be, and prefer not to give their babies an artificial substance.

The main research into the levels of vitamin K in breastfed babies was undertaken quite a few years ago when breastfeeding patterns were more regimented. It is possible that breastfed babies might not have been as well supplied with regular breastmilk as they are with current feeding practices. Further research is needed to confirm that exclusively breastfed babies are at the increased risk that the original studies suggest.