

Vitamin K Fact Sheet



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Did you know?

1. In the past, one out of every 100 babies had some bleeding, and one out of every 1,000 babies had serious bleeding—often brain bleeding—in the first days after birth. Once called “Hemorrhagic Disease of the Newborn,” it is now called Vitamin K Deficiency Bleeding (VKDB).
2. Since the US began to give babies Vitamin K shots in 1961, VKDB has become a very rare event.
3. In the past, most babies, even breastfed ones, got a lot of formula (supplemented with Vitamin K), another reason why VKDB has been so rare in the last 50 years that you may not have heard of it.
4. A brain bleed due to VKDB is very bad for the young brain. Many of these babies are disabled or die.
5. In the developing world, where Vitamin K is often not given, VKDB is still a major health problem.
6. If you plan for your son to be circumcised, most physicians in San Diego will require that baby has received Vitamin K by injection.

What is the story about natural Vitamin K levels in babies?

1. Infants get very little Vitamin K from mom during pregnancy.
2. At birth the baby’s blood level is very low compared to adults.
3. On days 2 and 3 of life, Vitamin K levels drop even further.
4. Infants require daily intake of Vitamin K, as little is stored up in the body.
5. Very little Vitamin K gets into mom’s breast milk, even if she takes a supplement.
6. Exclusively breastfed babies are at higher risk of bleeding, especially in the first days and weeks of life when they are getting low volumes of mother’s milk.

What about oral vitamin K?

1. There is no studied or tested liquid form appropriate for babies in the US.
2. Most European and Asian countries that use oral Vitamin K have more babies with brain bleeding than countries that use the Vitamin K shot.
3. Some oral Vitamin K routines used in the past in places like Denmark and Holland were as effective as the shot. But, a unique oral Vitamin K liquid not available in the US was used, and the dose had to be repeated weekly.
 - a. In the year 2000, Denmark changed to giving the shot instead of oral because the unique oral liquid became unavailable in Europe.
 - b. In Holland, they tried a newer oral Vitamin K liquid after the old one became unavailable, but it turned out to be associated with more brain bleeds. Now, Dutch families that choose the oral route have to give vitamin K *DAILY for 12 weeks*.
4. Because Vitamin K is so fatty, oral Vitamin K liquid requires a special solvent to be effective. All Vitamin K liquids are therefore not alike. We cannot assume the Vitamin K is working just because the baby swallows it.

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5. There is no standard regimen for oral Vitamin K, and no standard preparation available for babies, so families that choose this route do not have the security of knowing it will be effective at preventing their baby from having a brain bleed.

Why is the injection better?

1. The injection places the Vitamin K in the muscle where it will be gradually released into the bloodstream over several weeks.
2. The injection avoids all the problems with unreliable absorption into the baby's blood that we worry about with oral Vitamin K.
3. Vitamin K injection protects best against all types of VKDB, even the type that happens after 1 month of age
4. The shot can be given to your baby when she is skin-to-skin or on the breast.

Is Vitamin K toxic?

1. There are no known harmful systemic effects from a standard 1 mg shot.
2. Large studies have not found an association between Vitamin K shots at birth and childhood leukemia.
3. Preparations used prior to the 1960s were associated with red blood cell destruction and high bilirubin. The currently available preparation does not cause this side effect, even when given in doses up to 25 mg.
4. There is no mercury preservative in Vitamin K.
5. There is no controversy within the American Academy of Pediatrics about the 1 milligram injectable dose we use at UC San Diego Health System.

RECOMMENDATION:

We strongly recommend that you give your baby the 1 milligram injection of Vitamin K within 6 hours of birth to prevent bleeding and other life-threatening complications.

We are happy to delay it until the baby has had some breastfeeding and skin-to-skin time!

