

# Why Does my Baby Need a VITAMIN K INJECTION?

## WHAT IS VITAMIN K?

Vitamin K is a critical vitamin needed to form blood clots. This helps control bleeding. Vitamin K is also important for keeping our bones healthy.

## WHY DO BABIES NEED VITAMIN K?

Adults get vitamin K from food—mainly green leafy vegetables—and from healthy bacteria in the gut. However, **babies have very little vitamin K in their bodies when they are born.** This is because only small amounts of vitamin K pass through the placenta. Also, the healthy bacteria that produce vitamin K in the baby's gut may take weeks or months to reach necessary levels for healthy blood clotting.

**Babies do not get enough vitamin K from breast (human) milk because it contains very low levels of vitamin K.** Because of this, babies are at increased risk for spontaneous bleeding in the first months after birth. To help prevent this, it is recommended that all newborns receive a vitamin K supplement in the form of an injection after birth, before leaving the hospital.

## WHAT IS VITAMIN K DEFICIENCY BLEEDING (VKDB)?

Babies who do not receive the vitamin K injection are at greatly increased risk of developing VKDB. VKDB can occur early (0–24 hours after birth), 1 to 7 days after birth ("classical"), or late (2 weeks–6 months after birth).

- **Early** VKDB is severe and is mainly found in babies whose mothers used medications that interfered with vitamin K action, such as some anti-seizure medications or isoniazid.
- **Classical** VKDB is typically seen as bruising or bleeding from the umbilical cord.
- **Late** VKDB is the most concerning type. This bleeding occurs in previously healthy babies up to 6 months of age. In 30% to 60% of cases it causes intracranial bleeding (bleeding into the brain, such as a stroke or hemorrhage). This life-threatening complication occurs more often in exclusively breastfed babies who did not receive vitamin K at birth, and babies who survive frequently have substantial long-term neurological problems.

## WHAT ARE THE WARNING SIGNS OF VKDB?

In most cases, there are no warning signs before a life-threatening bleed occurs. If symptoms do appear, they may include

- Bulging fontanelles (the soft spot on the head)
- Widespread bruising
- Poor feeding and/or changes in behavior
- Bleeding from the nose
- Changes to skin color
- Becoming pale or lethargic

## HOW CAN I PREVENT VKDB?

Making sure your child receives a vitamin K injection after birth is the best way to prevent spontaneous bleeding in the brain or other parts of the body. Babies who do not get the vitamin K injection are 80 times more likely to develop VKDB than those who do get the injection. VKDB is best prevented by the vitamin K injection, as there is no reliable alternative available. After receiving this injection, the chance of late VKDB falls to less than 0.001% (1 in 100,000 babies).

## IS THE VITAMIN K INJECTION SAFE?

Yes, the vitamin K injection is safe and protects your baby from VKDB. A very old study described a possible link between the vitamin K injection and leukemia, but many follow-up studies have shown this to be false. No evidence of harm has been found from a single vitamin K injection when it is injected into a baby's thigh shortly after birth.

For more information, visit [healthychildren.org](http://healthychildren.org)

NOTE: If you decide to decline the vitamin K injection for your baby, inform your pediatrician. The pediatrician will need to know so they may respond accordingly if your child develops VKDB.



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