

The importance of Vitamin K for a newborn

Why is Vitamin K necessary?

Vitamin K is essential for the formation of blood clotting factors and normal blood clotting.

Why is ensuring an adequate intake of Vitamin K particularly important for a newborn?

Newborns have low stores of Vitamin K because the placenta poorly transfers Vitamin K, breast milk contains only a small amount of Vitamin K, and the newborn's intestinal bacteria cannot produce enough Vitamin K.

What can Vitamin K deficiency cause in a child?

Vitamin K deficiency can lead to a serious bleeding episode shortly after birth or within the first few months, typically occurring in the brain but also potentially in internal organs. Severe brain bleeding in a newborn can result in permanent disability.

How does administering Vitamin K affect the occurrence of severe bleeding?

Administering Vitamin K through an intramuscular injection shortly after birth practically prevents serious early bleeding. Vitamin K can also be administered orally in multiple doses during the first few weeks, but its effectiveness is not as high as when given intramuscularly.

Are there side effects associated with Vitamin K administration?

Intramuscular administration of Vitamin K for the prevention of serious early bleeding in newborns has been practiced since the 1950s. Giving Vitamin K is safe, and there are no short-term or long-term side effects.

The administration of Vitamin K is always based on parental consent. Pediatricians specialized in newborn care recommend giving Vitamin K to all newborns primarily through intramuscular injection and secondarily through oral administration. In maternity hospitals, parents are provided with information about the significance of Vitamin K for newborns to support decision-making as needed.

December 22, 2023

Board of the Neonatology Subsection, Finnish Pediatric Society

References

- 1. Hand I, Noble L, Abrams S. Vitamin K and the Newborn Infant. Pediatrics 2022;149: e2021056036.
- 2. Jullien S. Vitamin K prophylaxis in newborns. BMC Pediatr 2021;21(Suppl 1):350.
- 3. Ng E, Loewy A. Guidelines for vitamin K prophylaxis in newborns. Paediatr Child Health 2018;23:394-402.