

Strong Ties

The Association of Maternal Vitamin D Intake During Pregnancy with Asthma in Infants and Children

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Introduction

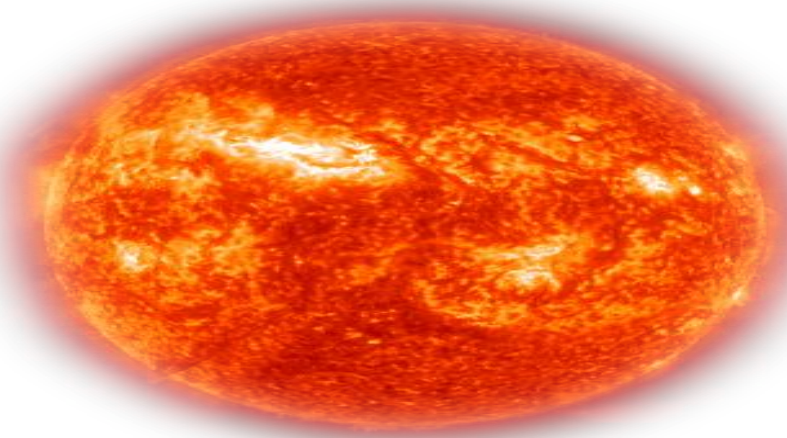
Asthma is a chronic disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person.¹

Vitamin D is a nutrient that our body produced when we expose our skin to the sun.²

One theory stated that vitamin D help reduce inflammation in airways caused by asthma.^{2,3}

Important Sources of Vitamin D

Sun light⁴



Fortified food⁴



Mushroom⁴



Egg yolk⁴



Requirement of Vitamin-D During Pregnancy

If pregnant woman has adequate amount of the nutrient – 600IU/day will suffice.⁴

A deficient pregnant woman will require about a 1500-2000IU/day.⁴

Material and Methods

This poster discuss different perspective of studies that discussed the association between maternal vitamin D intake and reduced risk of developing asthma in infants and children.

Result

There is obviously an inverse association between maternal vitamin D intake and asthma in children especially children younger than 3 years

Discussion

A study held on America has concluded that there is no linkage between low maternal vitamin D intake and the chance of a child to develop asthma.³

Another study found that if the mother had a high vitamin D level in their blood, her child was more likely to develop asthma³

A Japanese research study the cases of 312 children found that the highest maternal intake of vitamin D; showed that the risk reduction of asthma was greater at 3 years than at 5 years of age; suggesting that the effect of vitamin D was attenuated after 3 years of age.²

Nevertheless, the amount of researches are not enough to detect whether the amount of vitamin D intake will reduce the risk of asthma in children or not, yet vitamin D has been reported to be essential for maintaining a normal respiratory system in adult and fetus.^{2,3}

Conclusion

Vitamin D is essential for maintaining a normal respiratory system in adult and fetus; the more vitamin D level during pregnancy the least likely to develop asthma in infants and children.

References

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2. Miyake, Y., et al. "Dairy food, calcium and vitamin D intake in pregnancy, and wheeze and eczema in infants." *European Respiratory Journal* 35.6 (2012)1228-1234.

3. Camargo, Carlos A., et al. "Cord-blood 25-hydroxyvitamin D levels and risk of respiratory infection, wheezing, and asthma." *Pediatrics* 127.1 (2011): e180-e187.

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