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

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**Abstract:**

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

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

**Introduction:**

Asthma is a very common condition in childhood, and it is a disease characterized by wide variations over short periods of time in resistance to flow in intrapulmonary airways.<sup>1</sup>

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

Doctors and scientists believe there is a link between vitamin D and asthma; it is more likely to get asthma for people who live in cities, are obese or with dark skin.<sup>2,3,4</sup>

Also, one theory stated that vitamin D help reduce inflammation in airways caused by asthma. Based on this theory scientists are looking into whether getting enough vitamin D during pregnancy can reduce the chance of developing asthma in infants and children.<sup>2,3,4</sup>

This report study the relation between the maternal vitamin D intake during pregnancy and asthma in both infants and children.

**Discussion:**

There are several research studies that looked at how much vitamin D mothers get during pregnancy and whether or not their children get asthma later life.

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, while another found that if the mother had a high vitamin D level in their blood, her child was more likely to develop asthma, on the other hand, other studies stated that the highest vitamin D level the least likely to develop asthma in infants.<sup>3</sup>

A Japanese research carried out by Kozue Nakamura study the cases of number of 312 children found that the highest maternal intake of vitamin D; showed that the risk reduction of asthma was greater at 3 years of age than at 5 years of age; suggesting that the effect of vitamin D was attenuated after 3 years of age. In contrast, another study show a significant risk reduction of wheezing for first 5 years and no association was shown at 2 years of age.<sup>2</sup>

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, such effect of vitamin D may have also contributed to the

observed inverse association between high vitamin D consumption during pregnancy and children`s asthma.<sup>2,3,4</sup>

**Conclusions:**

To conclude, there is obviously a strong inverse association between maternal vitamin D intake and asthma in both infants and children especially those who are younger than three years of age.

**Recommendations:**

Investigate the relationship between maternal vitamin D level and eczema in infants, because there is a strong relation between high maternal vitamin D level and eczema, so how can we regulate vitamin D intake in pregnant women to prevent both asthma and eczema.

**References:**

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