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essentials of health

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Pregnant mothers who have deficient levels of serum vitamin D are more likely to have children with reduced bone mineral density. Low bone mineral density in childhood increases the risk of osteoporosis and fractures later in life.

ADEQUATE VITAMIN D DURING PREGNANCY REDUCES RISK OF FUTURE OSTEOPOROSIS IN CHILDREN

Vitamin D insufficiency is common in women of childbearing age, and increasing evidence suggests that the risk of osteoporosis and bone fracture in adulthood could be influenced by a mother's vitamin D status during pregnancy.

Scientists conducted a nine-year follow up of the mothers of 198 children where the mother's nutrition and vitamin D status had been evaluated during pregnancy. Thirty-one percent of the mothers had vitamin D levels considered insufficient, and 18 percent had deficient levels during late pregnancy. Women who used vitamin D supplements had higher average vitamin D levels than non-supplement users.

Not surprisingly, an association was found between lower concentrations of serum vitamin D in late pregnancy and children with reduced bone mineral content, bone area, and bone mineral density at nine years of age. The bone mineral content of children where the mother was vitamin D deficient was significantly lower than that of children whose mothers had adequate vitamin D levels. Children of women who had taken vitamin D supplements experienced significantly greater bone mineral content and bone areas than those of non-supplement users.

The study authors concluded that vitamin D supplementation of pregnant mothers could lead to a reduced future risk of osteoporosis and bone fractures in their offspring.

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