Essentials of Health

A new study shows that providing zinc supplementation to normally healthy zinc-deficient women reduces pregnancy complications and improves neonatal health outcomes.

Zinc supplementation reduces pregnancy complications and improves neonatal health

Zinc is an essential mineral that is necessary for normal growth, immune function and neurological development. Iron and folic acid are routinely supplemented during pregnancy, but less emphasis has been put on zinc, although a low zinc level can result in poor pregnancy outcomes.

In a new study published in the *Journal of Nutrition*, researchers evaluated the effect of two regimens of zinc supplementation on pregnancy outcomes. Participants in the double-blind, randomized controlled trial were 675 normally healthy pregnant women between the ages of 20 and 45 years. Eligible subjects had a serum zinc level below the estimated average requirement for gestational age. The women were randomly assigned to one of three regimens: Zinc supplementation alone (30 mg/day of zinc sulfate), a combination of 30 mg/day of zinc sulfate plus multivitamins (B1, B6, D3, C and E), or a placebo. The women were monitored from recruitment until one week after delivery.

Both zinc alone and in combination resulted in significantly fewer 2nd and 3rd stage pregnancy complications when compared to placebo. In addition, stillbirth, pre-term delivery, and complications such as respiratory tract infections were reduced in both groups supplemented with zinc. There was no significant difference in the average birth weight between the three groups.

The results of this study showed that in pregnant women with low zinc levels, supplementation with zinc is effective in reducing pregnancy complications and early neonatal complications such as respiratory tract infections.

Samia A. Nossier, Noha E. Naeim, Nawal A. El-Sayed and Azza A. Abu Zeid. The effect of zinc supplementation on pregnancy outcomes: a double-blind, randomised controlled trial, Egypt. British Journal of Nutrition, available on CJO2015. doi:10.1017/S000711451500166X.