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Multivitamin and mineral supplements for mums-to-be are needless expense

Focus should be on improving overall diet and taking folic acid and vitamin D instead

Multivitamin and mineral supplements, often promoted to pregnant women as a means of giving their child the best possible start in life, are unlikely to be needed by most mums-to-be and are an unnecessary expense, concludes a review of the available evidence, published in this month's issue of the ***Drug and Therapeutics Bulletin (dtb)***.

Pregnant women would do well to resist the marketing claims, which don't seem to translate into better outcomes for mother or baby, and, instead, focus on improving their overall diet and taking folic acid and vitamin D supplements, both of which are available at relatively low cost, it says.

Good nourishment, both before and during pregnancy, is essential for the health of the mother and her unborn child, says ***dtb***. And deficiency in key nutrients has been linked to various complications of pregnancy and birth, including pre-eclampsia, restricted fetal growth, neural tube defects, skeletal deformities and low birthweight.

A wide range of multi-vitamin and mineral supplements is heavily marketed to women for all stages of pregnancy to guard against these sorts of problems.

Typically these supplements contain 20+ vitamins and minerals, such as vitamins B1, B2, B3, B6, B12, C, D, E, K, folic acid, iodine, magnesium, iron, copper, zinc and selenium, at a cost of around £15/month.

In a bid to critically examine the current UK guidance for vitamin supplements recommended for pregnant women, and the evidence behind it, the *dtb* reviewed the published research on folic acid, vitamin D, iron, vitamins C, E, and A, and multivitamin supplements.

It found that folic acid had the strongest evidence to support national UK guidance, which recommends that women take 400 ug of folic acid daily from before, until 12 weeks of, pregnancy. A daily dose of 5 mg is recommended for those women at higher risk of having a child with neural tube defects - those who have neural tube defects themselves, a family history of the condition, or who have diabetes.

The evidence for vitamin D supplementation was less clear-cut, with little of the trial data showing any impact on reducing the risk of complications of pregnancy or birth, the review found. Nevertheless, a daily dose of 10 ug is recommended throughout pregnancy and breastfeeding.

As to the other supplements, there was no evidence of any obvious clinical benefit for most women who are well nourished, and high doses of vitamin A may harm the developing fetus.

Furthermore, the available data don't support the use of multi-vitamin supplements in most pregnant women either, says *dtb*.

“We found no evidence to recommend that all pregnant women should take prenatal multi-nutrient supplements beyond the nationally advised folic acid and vitamin D supplements, generic versions of which can be purchased relatively inexpensively,” it says.

Much of the evidence on which the marketing claims for multi-vitamin supplements are based, comes from studies carried out in low income countries, where women are more likely to be undernourished or malnourished than women in the UK, points out *dtb*.

And a good deal of the evidence derives from observational studies which are subject to bias, and can only establish an association, not cause, it says.

“For most women who are planning to become pregnant or who are pregnant, complex multivitamin and mineral preparations promoted for use during pregnancy are unlikely to be needed and are an unnecessary expense,” it concludes.

“The marketing of such products does not appear to be supported by evidence of improvement in child or maternal outcomes,” it adds, suggesting that: “Pregnant women may be vulnerable to messages about giving their baby the best start in life, regardless of cost.”

Women may simply be unaware that the only supplements recommended for all pregnant women are folic acid and vitamin D, says *dtb*.

Notes for editors:

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