Seeking a miracle tablet: nutrient supplements for pregnancy

The old wives’ saying that “A woman will lose a tooth for every baby” fortunately no longer holds true in many parts of the world today. Thanks to the efforts of researchers in the field of nutrition, many adverse effects of pregnancy have dwindled. Today, no one questions the importance of iron and folic acid supplements for preventing anemia and neural tube defects in the growing child.

Despite the existing clinical evidence, nutrient supplements have long straddled the realm between scientific evidence and myth. Today, this discipline is a hotbed of debate and discovery, with all types of supplements coming under scrutiny.

In her recent review published in the Annales Nestlé, Usha Ramakrishnan provides a thorough overview of the different types of nutritional supplements available to pregnant women today. Beginning with the tried-and-tested iron and folic acid, Ramakrishnan moves the spotlight onto the obscure components, such as iodine, calcium, and zinc. The article ends with the more controversial members of the supplement family: antioxidants, long-chain polyunsaturated fatty acids and probiotics.

Ramakrishnan points out that researchers in this field face unique challenges: such as a lack of uniform treatment across clinical trials, small numbers of patients, and the absence of long-term follow up. Much of the evidence comes from observational studies, making it difficult to draw conclusions on the actual benefits of a particular supplement. For example, although maternal iodine deficiency has been linked to mental retardation in children, it is difficult to quantify the benefits of iodine supplements in pregnant women. What are the threshold levels needed, and how do individuals react to supplements? What about those with only mild or moderate deficiencies? Such are the questions faced by researchers whose goal is to measure the benefits of new supplements.

But lack of hard evidence does not mean we should throw these supplements off the shelf. On the contrary, use of multivitamins and probiotics has shown benefits in special subgroups, such in people with suboptimal diets and those with genital tract infections. And importantly, no serious side effects have been linked to these supplements. It remains to be seen how we can best use each supplement to improve the health of pregnant women worldwide.

References