One of the most significant things you can do when attempting to conceive or while pregnant is to make sure to be fueling yourself, and your unborn child, with a nutritious diet. Pregnancy is taxing on the body and it is often hard or near impossible to obtain all the recommended nutrients without vitamin supplementation. Making smart choices concerning what you eat and the supplements you take will promote healthy development and growth of your baby says Certified Nutrition Specialist and Innerzyme founder, Katie Jodscheidt. One vitamin that is gaining more and more interest is vitamin K2, which is found in fermented foods such as natto and certain cheeses, eggs, meat, butter and other dairy foods from grass-fed sources. However, just because a food is fermented does not necessarily mean it is rich in vitamin K2, in fact, many are not.

Many Eastern cultures consume fermented soybeans or natto on a daily basis, however, the slimy and smelly taste and texture of it is often too unpleasant for the Western palate. As far as other foods containing vitamin K2, getting an adequate amount is not as easy as one may think since many foods are lacking this essential nutrient because they are processed, genetically modified and no longer sourced from grass-fed animals. An easier and more convenient way of getting an adequate amount of vitamin K2 is through daily supplementation. However, not all vitamin K2 supplements are created equal. When choosing a vitamin K2 supplement, quality, dosage and type of vitamin K2 is important. The optimal quality of vitamin K2 is in the natural form of MK-7 because it has a longer half-life, meaning it stays in your system longer and the body better absorbs it. In healthy individuals, research has not reported any side effects, adverse reactions or known toxicity as a result of large doses of vitamin K2. In fact, many Eastern cultures consume 300-600mcg of natto daily. Inside the human body vitamin K2 is involved in many processes that are critical for a healthy pregnancy and baby, such as blood coagulation, bone metabolism and other calcium dependent events.

Research into the health benefits of vitamin K2 is still in its infancy with more and more work being done. Two recent peer reviewed studies provide encouraging results concerning the role of vitamin K2 in embryonic development. In August 2014, a cohort of Japanese researchers discovered that an enzyme called UBIAD1, which is involved in vitamin K2 synthesis, is required for development of mouse embryos. When the scientists deleted both copies of the gene coding for UBIAD1 mice embryos died in less than 8 days after ceasing to grow, and as expected, produced no vitamin K2. Strikingly, when the mothers of these mutant mice were administered vitamin K2, the embryos lifespan was extended to term. Not long
after this report was published, Canadian researchers found that vitamin K2 supplementation significantly improved embryo production in cows\(^3\). This finding is most likely due to the role of vitamin K2 in mitochondria function, which converts sugars into energy for the cells to use. Together, these reports add to the increasing knowledge researchers at Innerzyme are gaining concerning the health benefits of vitamin K2 and warrant further research.

For more research on Vitamin K2, visit: www.innerzyme.com.

**References:**

