The Importance of Vitamin D

Vitamin D is a fat-soluble vitamin that plays several important roles in the body. Recent research has revealed that vitamin D is important for fertility, and maintaining a normal vitamin D level may improve your chances of conceiving, as well as having a healthy pregnancy.

Many women do not get enough sun exposure to maintain a normal vitamin D level, and vitamin D does not naturally occur in many foods, so it is difficult to get enough from diet alone. Typical prenatal vitamins contain only 400 IU of vitamin D, an amount that is inadequate for most women. One study showed that even with 800 IU per day, most pregnant women and their infants did not achieve a normal vitamin D level. For these and other reasons, low vitamin D levels are common among women trying to conceive.

The Importance of Vitamin D While Trying to Conceive

Achieving a normal vitamin D level is important for conception. A recent U.S. study showed that in women undergoing IVF, those whose vitamin D levels were normal had a significantly higher chance of success compared to those whose vitamin D levels were low. Women with a normal vitamin D level were four times more likely to get pregnant than women who were vitamin D deficient. Canadian researchers also concluded that women with normal vitamin D levels are significantly more likely to achieve clinical pregnancy following IVF than those with low levels.

The Importance of Vitamin D Once You Are Pregnant

Low vitamin D levels have also been associated with complications of pregnancy including gestational diabetes (high blood sugar), preeclampsia (pregnancy-induced high blood pressure), and bacterial vaginosis (bacterial overgrowth in the vagina).

Low vitamin D levels during pregnancy not only affect the well-being of the mother but can also affect the newborn. Adequate vitamin D during pregnancy is important for skeletal development, as well as general growth and development of the fetus.

Vitamin D Supplementation Recommendations

The amount of vitamin D you need to take depends on several factors. The most important is your current (baseline) vitamin D blood level, which is measured as “serum 25(OH)D.” A level of 30ng/ml or higher is generally considered normal. This is the goal for women trying to conceive.

Recent research has shown that doses of 2,000 to 4,000 IU of vitamin D3 per day are safe and effective in restoring a normal vitamin D level. Vitamin D3 (cholecalciferol) is the preferred Vitamin D preparation and can be obtained on line or over the counter.
The table below shows vitamin D recommendations to restore a level above 30ng/ml based on the results of your baseline blood test.

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<th>Baseline level &lt; 24 ng/ml (very low)</th>
<th>Baseline level 24-30 ng/ml (low)</th>
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<tr>
<td>Recommended daily dose of Vitamin D₃ for 8-12 weeks</td>
<td>4000 IU</td>
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Once your vitamin D level is normal, 2000 IU of vitamin D₃ per day is recommended to keep you in the normal range.

Please check with your Shady Grove Fertility nurse for vitamin D supplement recommendations.

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