

Diamond Institute for Infertility and Menopause

Nutrition in Twin Pregnancy: Aiming to reduce premature delivery!

Jan 2012



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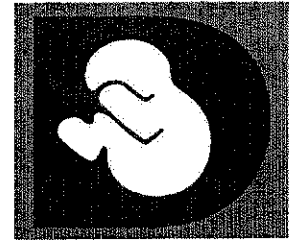
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Adequate nutrition is said to be the mainstay of a healthy pregnancy and successful outcome. Nutritional demands of pregnancy are increased in singleton pregnancy and significantly increased in multiples. Research studies have confirmed that maternal nutrition plays an important role in the outcome of twin gestation. Unfortunately preterm births (before 37 weeks gestation) account for 17% of multifetal births with 24% of these being low birth weight (<2500g) and 26% with very low birth weight (<1500g). While bed rest and in some cases, a cerclage, may prove helpful in preventing premature delivery, nutritional intervention is the ONLY method that has been consistently shown to improve pregnancy outcome in multiples.

The significance of adequate nutrition in pregnancy has prompted The American College of Obstetricians and Gynecologists to recommend the following goals for optimizing maternal nutrition in twin pregnancy: 1. Optimizing fetal growth and development, 2. Reducing the incidence of obstetric complications, 3. Increasing gestational age at delivery and 4. Avoiding excess maternal weight gain that could result in unnecessary postpartum weight retention. The daily recommendations for women with a normal pre-pregnancy body mass index (BMI) equates to 3500 calories inclusive of 175 g of protein, 350 g of carbohydrates and 156 g of fat. Based on current literature,

adequate early weight gain may enhance placental growth thereby helping to sustain adequate nutrient supply to twins later in pregnancy. Furthermore, achieving maternal weight goals positively impacts birth weight and gestational age at delivery. In fact, premature rupture of membranes and premature delivery is linked to a lack of nutrition and decreased protein rather than the body's ability to sustain a twin pregnancy. Research suggests that optimal twin outcomes (>2500g) correlates with maternal weight gain of 24 lbs by 24 weeks gestation. Overall, optimal twin pregnancy outcome is associated with a maternal weight gain of 20 kg (44 lbs). Thus far, nutrition controlled studies have established that we can reduce premature birth by 50% and/or delay premature birth resulting in better birth weight and less complications in the Neonatal Intensive Care Unit (NICU) by simply addressing nutrition from day one!

Since twin gestations are at increased risk for poor fetal growth and preterm birth, small improvements from benign interventions like micronutrient supplements (i.e. Vit. C, E, Mg, folic acid, iron) may have significant benefits. Iron deficiency is shown to be the most prevalent nutritional deficiency in the US and has been associated with an increased risk of preterm birth and low birth weight. In fact the rate of iron deficiency anemia in twin pregnancy is 2.4-4x higher than in



singleton pregnancy. The recommended daily dose for iron supplement during pregnancy is 30 mg. Following closely behind is anemia due to folate deficiency which is 8 times more common in twin pregnancies. Folate deficiency is associated with intrauterine growth restriction, pre-eclampsia and placental abruption. The recommended daily dose of folic acid during pregnancy is 1 mg.

Overall, while prenatal vitamins and folic acid are important supplements, adequate nutrition plays a key role. Many micronutrient supplements can be found in excellent food sources. In addition, patients may find that a nutritional consult during pregnancy can be helpful in making good nutritional choices. The nutritional consult can be obtained through resources from your OB/GYN and high risk specialists. Here at the Diamond Institute we offer nutritional consults to our patients as soon as twin pregnancy is diagnosed. We believe that starting early with adequate nutrition leads to greater success with pregnancy and overall pregnancy outcome. Remember, a woman's body is the first line of defense in nurturing fetal well-being!!!

***Please see the back of this sheet for further info.