

Importance of Prenatal Vitamins

Your Healthy News – Fertility Newsletter

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For many people, supplemental vitamins can assist in achieving and maintaining good health. Along with proper nutrition and following a healthy exercise regimen, prenatal vitamins should be discussed with your doctor. Prenatal vitamins provide added folic acid, iron, vitamin D, and calcium, which can help protect your baby against certain birth defects and assist with fetal growth.

Folic acid

Folic acid is important for new cell growth and to prevent neural tube defects such as anencephaly and spina bifida. The National Institutes of Health (NIH) describe anencephaly as a defect in closure in the neural tube during fetal development resulting in the absence of the brain, skull, and scalp.¹ The NIH also describes spina bifida as a neural tube defect since the fetus's spine does not close properly during pregnancy resulting in damage to the nerves and spinal cord which may include paralysis.²

According to the CDC, women should start taking 400 mcg of folic acid daily at least one month before planning to become pregnant and throughout their pregnancy.³ However, the US Department of Health and Human Services recommends that pregnant women consume 600 mcg of folic acid daily in addition to folic acid consumed from the diet.⁴ Women can get folic acid through a supplement (such as in a prenatal vitamin) or by eating a bowl of cereal that has the recommended amount of folic acid in it.³ Folic acid is also found in dark green vegetables, egg yolks, and some fruits.²

Iron

Iron intake during pregnancy is important to decrease the risk of anemia while pregnant. The recommended daily allowance (RDA) for non-pregnant females between the ages of 19 and 50 is 18 mg per day.⁵ During pregnancy, about one-third of the mother's iron stores are passed along to the developing fetus to aid in formation of blood and for storage. Thus, during the 2nd and 3rd trimesters of pregnancy, the RDA for iron is 30 mg per day.⁷

Calcium & Vitamin D

Calcium aids in fetal bone growth as well as protecting the bone mineral density of the mother. It is recommended that pregnant women consume anywhere from 1000-1300 mg per day of calcium; the 1000 mg per day recommendation is for those 19 to 50 years old.⁴ The recommended daily allowance for vitamin D is 200 IU daily – higher amounts have not been shown to provide additional benefits.⁷ Note that these recommendations are the same for non-pregnant women less than 50 years of age.

Nutrient Guidelines for Pregnant Women^{7/8}

The table below is a helpful resource for women who are pregnant or are hoping to become pregnant. Proper nutrients assist in your baby's growth and in keeping you healthy.

Nutrient	RDA for non-pregnant women	RDA for pregnant women
Vitamin A	700 mcg/day	750-770 mcg/day
Vitamin D	5 mcg/day (200 IU/day)	5 mcg/day (200 IU/day)
Vitamin E	15 mg/day	15 mg/day
Vitamin C	65-75 mg/day	80-85 mg/day
Thiamine (B1)	1-1.1 mg/day	1.4 mg/day
Riboflavin (B2)	1-1.1 mg/day	1.4 mg/day
Niacin (B3)	14 mg/day	18 mg/day
Pyridoxine (B6)	1.2-1.3 mg/day	1.9 mg/day
Folate	400 mcg/day	600 mcg/day
Calcium	1000-1300 mg/day	1000-1300 mg/day
Iron	15-18 mg/day	27 -30 mg/day
Zinc	8-9 mg/day	11-12 mg/day

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