



## Daily Pre-Conception & Pregnancy Recommendations for Key Nutrients for Mother and Baby

ESSENTIAL VITAMIN & MINERAL	IMPORTANT FUNCTIONS	FOOD SOURCES
FOLIC ACID / FOLATE Prenatal Vitamin 800-1000mcg 400-800 mcg Pre-conception 3 months prior pregnancy RMA CT rec 800mcg 1,000 mcg Pregnancy 4 mg Previous neural tube child 500 mg Lactation Twins + may need additional	DNA Synthesis-red blood cells/nervous system/proteins. Prevents spina bifida and other neural tube defects- critical in first 30 days. The neural tube is the foundation for the brain and spinal cord. Helps support the placenta. Helps to prevent miscarriage, preterm delivery, maternal anemia. Enzyme function.	Enriched /fortified cold/hot cereal, pasta, rice, breads/grains, FOLATE Source: lentils, split peas, beans – pinto, lima, northern, black, navy, white, kidney, chick peas, Cooked fresh or frozen green leafy-spinach, turnip greens, collards, romaine, asparagus, oranges, nuts – peanuts, seeds, grits, wheat germ
Prenatal Vitamin 28-30mg 15 mg Pre-conception 28-30 mg Pregnancy 48 mg Vegetarian Pregnancy 15 mg Lactation Vitamin C food helps iron absorption	To make hemoglobin protein to carry oxygen to tissues. Need for iron in pregnancy doubles to accommodate separate maternal and fetal blood supplies. Helps prevent anemia, fatigue, and preterm delivery and low birth weight.	Heme Sources: Red meat, poultry, fish, pork, clams, Non-Heme Sources: Iron fortified cereals, grains & pasta, oatmeal, cream of wheat, lentils, beans — chickpeas, lima, kidney, pinto, spinach, raisins, pumpkin & seeds, eggs, tofu, soybeans, prunes, avocado, figs, collards, green peas, swiss chard, broccoli, wheat germ, dried fruit, blackstrap molasses
CALCIUM Prenatal Vitamin 200-300mg 1000 mg Pre-conception 1000 mg Pregnancy 1000 mg Lactation Vitamin D helps calcium absorption. Vegetarians may need supplement.	Protects maternal calcium stores. Major component of bone-creates strong bones and teeth. Develops heart rhythm and blood clotting, Helps circulatory, muscular, cardiovascular, and nervous systems. Deficiency will put mother at increased risk of osteoporosis later in life.	Dairy Sources: milk, yogurt, cheese, ice cream, pudding Nondairy Sources: almonds, dried beans/peas, tofu, kale, collards, bok choy, spinach, sardines, canned salmon with bones, shrimp, sesame seeds, rhubarb, turnip greens, kale, broccoli, calcium/D fortified juice, Calcium/D fortified soy milk.
VITAMIN D Prenatal Vitamin 400 iu 600iu Pre-conception 600iu Pregnancy 600 iu Lactation Blood levels >30ng/ml Ideal 40-60 Vegetarians may need supplement	Assists calcium and phosphorus in bone and teeth formation and density. Muscle, bone, heart health, and immune function. Reduce risk for pre-eclampsia, and autoimmune diseases. Deficiency can cause rickets-skeletal & growth abnormalities.	Fortified milk, yogurt, soy milk, fat spreads, cereals and juices, fatty fish, egg yolks

ESSENTIAL VITAMIN & MINERAL	IMPORTANT FUNCTIONS	FOOD SOURCES
ESSENTIAL FATS 200-300mg DHA-omega 3 Vegetarians Need Increase	Development of fetal brain, vision, and nervous system. May decrease miscarriage, preterm labor, postpartum depression.	Wild Salmon, sardines, herring, anchovies, shrimp, scallops,blue crab, DHA Omega 3 Eggs
VITAMIN B6 Prenatal Vitamin 2.6mg 1.2-1.5 mg Pre-conception 1.9 mg Pregnancy 2.0 mg Lactation	Synthesis of red blood cells, brain, nervous immune, and cardiovascular system. Protein, carbohydrate, fat metabolism. May help with morning sickness.	Enriched/fortified hot, cold cereals, wheat germ, oats, bran, peanuts, walnuts, potato skins, banana, poultry, pork, lentils, chick peas, beans, fatty fish, avocado, mango, sunflower seeds, watermelon, eggs, broccoli, spinach
VITAMIN A -BETA CAROTENE Prenatal Vitamin 4,000-5,000iu (Not in retinol form) 700 mcg(2,300 iu)Preconception 770 mcg (2,565 iu) Pregnancy 1300 mcg Lactation Stay Below 10,000 iu / day because fat soluble, crosses placenta barrier and can cause birth defects at toxic levels.	Essential role in vision, cellular growth, and builds and maintains health of bones, skin, GI and urinary tracts.	Fortified milk, fat spreads, and cereals, eggs  Deep orange, yellow,green –carrots, pumpkin, collards, sweet potatoes, kale, spinach, broccoli, peppers, papaya, cantaloupe, guava, apricots, mandarin oranges, nectarines, peaches, persimmons, loquats, **Avoid Retin A, retinol, alpha hydroxy acids
VITAMIN C Prenatal Vitamin 70 mg 75 mg Pre-conception 85 mg Pregnancy 120 mg Lactation	Promotes healthy gums, teeth, bones, collagen, cartilage, ligaments. An antioxidant that protects & repairs tissues from damage by reducing free radicals. Builds healthy immune system. Helps to absorb iron. Decreases preterm delivery risk.	Citrus fruits, oranges, grapefruit, lemons, limes, bell peppers, green beans, strawberries, papaya, potatoes, broccoli, tomatoes, kiwi, mango, guava, broccoli, cauliflower, kale, cassava, spinach, kohlrabi, cabbage, collards, potatoes,
VITAMIN B12 Prenatal Vitamin 2.6-12mcg 2.4 mcg Pre-conception 2.6 mcg Pregnancy 2.8 mcg Lactation 25-30 mcg. Vegetarian	DNA Synthesis. Normal red blood cell function. Cardiovascular and nervous system health. Strict vegetarians-deficiency risk	Meats, poultry, fish, seafood, eggs, dairy, nutritional yeast, fortified soy milk
VITAMIN E Prenatal Vitamins 10 mg 15 mg Pre-conception (22iu-30iu tocopherol) 15 mg Pregnancy 19 mg Lactation	Antioxidant-protects cell membranes. Along with vitamin C-may decrease risk of preeclampsia. Formation of red blood and muscle cells.	Wheat germ, vegetable oil, nuts- sunflower seeds, hazelnuts, almonds, peanuts, spinach, fortified cereals and fat spreads, almond butter, peanut butter, avocado
PROTEIN 46 gm Pre-conception 71 gm 2nd and 3rd trimester 150-200 gm Twins/Triplets	Cellular growth, development, repair and metabolism. Greater demand for building fetus, stronger uterus, placenta, blood and tissue. Role in enzyme, antibody, hormone function.	Meats, poultry, seafood, eggs, milk, yogurt, beans, lentils, peas, nuts, seeds, vegetables, grains,