



Prenatal & Postnatal

Daily Nutritional Support for Mother and Baby

Why is a Prenatal and Postnatal Multivitamin Supplement Important?

A prenatal and postnatal multivitamin/mineral supplement provides essential daily nutritional support for mother and baby during pregnancy and lactation, when calorie and nutrient demands are higher and proper maternal nutrition is crucial for the growth and development of the baby. During pregnancy and lactation, the mother must meet the nutritional needs of a growing baby without sacrificing her own nutrient requirements. Multivitamin/mineral supplements designed for pregnancy and breastfeeding are specially formulated with essential nutrients necessary to support the needs of both the mother and the growing baby, including (but not limited to) folic acid, iron, vitamin D, calcium, iodine, DHA, and choline.[†]

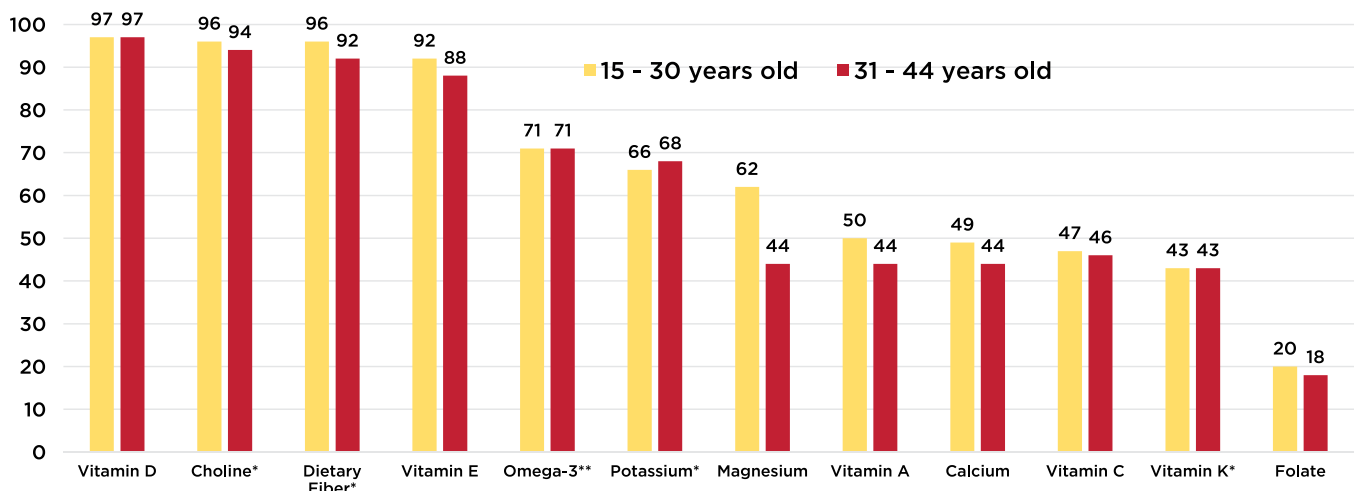
The latest Dietary Guidelines for Americans (DGA) reports more than 80% of US adults have dietary patterns that are low in vegetables, fruits, and dairy.¹ According to nationally representative research data, women of child-bearing age are not meeting dietary recommendations for vitamins A, C, D and E, magnesium, calcium, and the omega-3s EPA and DHA (Table 1).² While a well-balanced intake of nutrient-dense foods such as fruits, vegetables, whole grains

and lean protein is important, a daily prenatal or postnatal multivitamin/mineral supplement helps address nutrient gaps missing from the diet to support the health of the mother and her developing baby.

When is the Best Time to Start a Prenatal or Postnatal Multivitamin Supplement?

Women who are trying to conceive should start taking a prenatal multivitamin supplement right away and then continue to take it daily throughout pregnancy. Why should women start taking a prenatal multivitamin before becoming pregnant? Adequate levels of certain nutrients, like folic acid, are needed at the time of conception for a healthy pregnancy. Folic acid supplementation at least one month prior to conception and throughout pregnancy may reduce a woman's risk of having a child with a brain or spinal cord defect. The neural tube (which later becomes baby's spinal cord, spine, brain and skull) forms between days 17 and 30 of gestation, before many women know they are pregnant.³ After birth and while breastfeeding, mothers should take a daily postnatal multivitamin supplement to support the enhanced nutrient needs of a nursing mother and her baby.⁴

WOMEN OF CHILD-BEARING AGE & PERCENTAGE OF INTAKE BELOW EAR OR AI^{2,12}



[†]Nutrients with approximate Intake Below AI
^{**}Blood levels

Key Nutrients for Pregnancy & Lactation:

During pregnancy and lactation, daily requirements for some micronutrients are higher to meet the physiologic changes and increased nutritional needs of mother and her developing baby. For most nutrients, the Recommended Dietary Allowance (RDA) for pregnant women is increased compared to women who are not pregnant. Please see the table below for recommended intakes of key nutrients during pregnancy and lactation:

DAILY RECOMMENDED INTAKES OF KEY NUTRIENTS DURING PREGNANCY AND LACTATION:

Nutrient	RDA (Pregnancy)	RDA (Lactation)	Good Food Sources	Examples
Folate / Folic Acid (Dietary Folate Equivalents (DFE))	600 mcg DFE	500 mcg DFE	Legumes (beans, lentils), green leafy vegetables, fortified grains	Lentils ½ cup cooked = 179 mcg DFE Garbanzo beans ½ cup cooked = 141 mcg DFE Spinach ½ cup cooked = 131 mcg DFE
Iron	27 mg	10 mg (14–18 y) 9 mg (19+ y)	Meat, fish, poultry, legumes, nuts	Lentils ½ cup cooked = 3.3 mg Beef 3 oz cooked = 1.6 mg Canned light tuna 3 oz = 1.3 mg
Calcium	1300 mg (14–18 y) 1000 mg (19+ y)	1300 mg (14–18 y) 1000 mg (19+ y)	Milk, cheese, yogurt, kale	Yogurt 8 oz = 415 mg Milk 8 oz = 300 mg Kale ½ cup cooked = 47 mg
Vitamin D	15 mcg ^a (600 IU)	15 mcg ^a (600 IU)	Fatty fish, fortified foods	Salmon 3 oz canned = 370 IU Fortified milk 8 oz = 98 IU
Iodine	220 mcg	290 mcg	Dairy foods, iodized salt, seafood	Milk 8 oz = 99 mcg Iodized salt 1/6 tsp = 77 mcg
DHA	200 mg ^b	200 mg ^b	Seafood, especially fatty fish	Salmon (Wild) 3 oz = 952 mg Oysters 3 oz = 212 mg Tuna, canned, light 3 oz = 190 mg
Choline	450 mg ^c	550 mg ^c	Eggs, seafood, meat, poultry, nuts	Egg 1 large = 147 mg Beef 3 oz cooked = 97 mg Salmon 3 oz canned = 75 mg

a The RDA is 600 IU/day for bone health, however per Endocrine Society Guidelines, daily supplementation of 1,500-2,000 IU (37.5-50 mcg)/day may be needed to maintain serum vitamin D levels in the healthy range, and 6,000 IU (150 mcg)/day to treat deficiency.

b Recommendations from the Perinatal Lipid Intake Working Group, European Food Safety Authority, and International Society for the Study of Fatty Acids and Lipids

c AI = Adequate Intake

Folate/Folic Acid:

Also known as vitamin B₉, folate is the natural food form found particularly in leafy-green vegetables and legumes. Folic acid is the synthetic form used to fortify foods and found in supplements. To help individuals (particularly women of childbearing age) consume adequate folic acid, foods like breakfast cereal, bread, pasta and rice have been fortified with folic acid throughout the United States food supply since 1996.⁴ Both forms may be consumed to meet the overall dietary requirement. Adequate folic acid in healthful diets is important for the developing baby and may reduce a woman's risk of having a child with a brain or spinal cord defect. Folic acid supplementation should start before conception through at least the sixth week of pregnancy.³⁻⁴

Iron:

Iron is an essential mineral utilized by red blood cells to help carry oxygen to organs, tissues and baby.[†] Women's iron needs during pregnancy substantially increase to support their increased blood volume and red blood cell formation, as well as the healthy growth of their baby.⁵ Low maternal iron status during pregnancy has been associated with increased risk of low birth weight, preterm delivery and other adverse outcomes.⁵

Calcium and Vitamin D:

Calcium and vitamin D are both essential nutrients for baby's skeletal development, helping the developing baby and infant build healthy, strong bones and help prevent rickets.^{6-7†} Without sufficient daily calcium intake, calcium is sacrificed from the mother's bones to support the rapid bone mineral growth in the developing baby.⁶ Vitamin D helps improve calcium absorption in the gut and also independently provides bone mineral support functions.^{6-7†} Although dairy provides a good source of calcium and vitamin D, national research demonstrates that 49% of women ages 15-30 and 44% of women ages 31-44 are not meeting dietary recommendations for calcium. Furthermore, 97% of women of child-bearing age are not meeting dietary recommendations for vitamin D.² A prenatal and postnatal multivitamin/mineral supplement can help fill these key nutrient gaps.

Iodine:

Iodine is an essential mineral, important for normal thyroid function and neurocognitive development in developing babies and infants.^{8†} Iodine is found in the diet mostly from iodized salt, seafood and dairy (e.g. milk), however, increased consumption of processed foods (which largely use non-iodized salt), along with trends of non-iodized salt (e.g. sea salt), has led to a decrease in dietary iodine intake and status in American women of childbearing age.⁹ The American Academy of Pediatrics recommends a prenatal supplement with 150 micrograms of iodide daily, along with consuming iodized table salt during pregnancy.

DHA:

Docosahexaenoic acid (DHA) is a polyunsaturated omega-3 fatty acid mainly supplied to the diet from marine-based sources (including algae), although DHA levels are highest in fatty fish such as wild salmon, tuna, sardines, and anchovies. Research demonstrates that DHA helps support the healthy growth and development of the baby's brain, eyes, and nervous system.^{10-11†} DHA is crucial to baby's central nervous system growth and development throughout pregnancy. As a primary fatty acid in the brain and eyes, DHA is needed for proper eye and brain function, and DHA levels peak in the third trimester as baby's brain and eyes rapidly develop. After birth during the postnatal period, DHA remains important to baby's development. Breast milk is not naturally high in DHA, therefore it is critical to ensure adequate DHA in the diet or through supplementation while breastfeeding.

Fatty fish are excellent dietary sources of omega-3 fatty acids. Women of child-bearing age, pregnant women and breastfeeding mothers are advised to consume 8-12 ounces (2-3 servings) of lower-mercury fish every week, according to the latest Dietary Guidelines for Americans.¹ US women of child-bearing age are not meeting this recommendation from their diets - about 71% of women have omega-3 blood levels (EPA and DHA) below US Dietary Guidelines recommendations.¹² A daily prenatal supplement with at least 200 mg DHA, or a separate daily omega-3 supplement, should be considered if fish or seafood intake do not meet the recommendations above.

Choline:

Choline is an essential nutrient important for making phospholipids that are structural components of cell membranes, and transporting fats within the cell membrane, including DHA. During pregnancy, choline is necessary for placental development and to support fetal organ growth. The demand for choline increases as pregnancy progresses. Recent research indicates that most American women of child-bearing age are not consuming enough choline through their diet (96% of women ages 15-30 years and 94% of women ages 31-50 years).² The latest Dietary Guidelines for Americans notes the importance of choline during pregnancy and lactation for proper brain and spinal cord development, and that most women do not meet recommended intakes of this important nutrient.¹



About Nature Made®

Over the last 50 years, Nature Made has been a trusted leader in the wellness industry. They have helped pioneer quality standards for vitamin, mineral and herbal supplements, and remain dedicated to formulating products backed by science. Committed to Good Manufacturing Practices (GMPs), Nature Made's quality extends to every aspect of our production, from purchasing high-quality raw materials to routine testing for purity and potency. In fact, they were the first national supplement brand to have a product verified by United States Pharmacopeia (USP), and it is the national supplement brand with the most products carrying the USP Verified Mark, verification that products meet stringent quality criteria for purity and potency. Nature Made is also the #1 Pharmacist Recommended Supplement Brand in 9 Categories**

For more information visit: [NatureMade.com](https://www.naturemade.com)

These materials are intended for educational purposes only.

**Find those Nature Made USP verified products on [NatureMade.com/USP](https://www.naturemade.com/USP)*

***Based on 2019 U.S. News & World Report - Pharmacy Times Survey*

†These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

References

1. US Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).
2. Devarshi P, et al. Am J Clin Nutr 2021;113:1042-1052.
3. Centers for Disease Control & Prevention. Folic Acid. <https://www.cdc.gov/ncbddd/folicacid/about.html>.
4. Bailey LB. Present Knowledge in Nutrition, 10th edition. Iowa: Wiley & Sons.2014;pp.321-42.
5. Scholl TO. Am J Clin Nutr. 2005;81:1218-1222.
6. Institute of Medicine. Dietary Reference Intakes for Calcium and Vitamin D. National Academy Press. Washington, D.C. 2010.
7. Wagner CL, et al. Nutrients. 2012;4:208-230.
8. Institute of Medicine. Dietary Reference Intakes for Iodine. National Academy Press. Washington, D.C. 2001.
9. Perrine CG, et al. J Nutr. 2010;140(8):1489-1494.
10. Cetin I, Koletzko B. Curr Opin Clin Nutr Metab Care. 2008;11:297-302.
11. Koletzko B, et al. J Perinat Med. 2008;36(1):5-14.
12. Murphy RA, et al. BMJ Open, May 2021.

