Pregnancy - Common Symptoms and Care Tips
Article

Pregnancy Vitamins & Prenatal Supplements

JUN 13, 2022

Eating well is one of the best things you can do during pregnancy, it will help in getting enough nutrients to support your health and your fetus’s health.

YOUR PREGNANCY FRIENDLY MICRONUTRIENTS

- Eating well is one of the best things you can do during pregnancy, it will help in **getting enough nutrients to support your health** and your fetus's health.[1] Micronutrients which refer to vitamins and minerals, are **key to important bodily functions and key to help infants and children grow, learn,** and thrive. [2] Pregnant woman need more of folic acid, iron, zinc, calcium, vitamin D, vitamin A, choline, B vitamins, and vitamin C.[2,3]



Vitamin /Mineral	Recommended daily amount	Role in your body and your fetus's body	Food and other sources
Iron	27mg	• Make extra blood needed by you and fetus • Growth and development of fetus's brain • Prevention of low birth weight, anemia, and premature delivery	• Beef, • Beans, • Spinach, • Dried fruits • Oatmeal or grains fortified with iron.
Zinc	11mg	• Immunity • Resistance to infection • Proper growth and development of fetus nervous system	• Red meats • Poultry • Beans • Nuts • Whole grains • Fortified cereals • Dairy products
Calcium	1000mg	• Reduce risk of Pre-eclampsia (medical condition where pregnant woman experiences a sudden increase in their blood pressure) • Build fetus strong bones and teeth	• Dairy products such as milk, cheese, yogurt • Broccoli, • Fortified foods (cereals, breads, and juices) • Almonds and sesame seeds, • Sardines • Dark green leafy vegetables
Vitamin D	15mcg	• Helps calcium in building fetus's strong and healthy bones and teeth • Essential for muscle and nerve functions, • Helps the immune system fight off bacteria and viruses, • Healthy eyesight and skin	• Sun exposure • Fortified milk and breakfast cereals • Egg yolks • Fatty fish such as salmon and sardines
Vitamin A	770mcg	• fetus's growth of bones and teeth • Formation of healthy eyesight, skin, • Immune function	• Milk • Eggs • Carrots • Spinach • Green and yellow vegetables • Broccoli • Potatoes • Pumpkins • Yellow fruits • Cantaloupe
Choline	450mg	• Development of fetus's brain and spinal cord	• Chicken • Beef • Eggs • Milk • Soy products • Peanuts
Vitamin C	85mg	• Protects tissues from damage • Helps body absorb iron • Building a healthy immune system • Healthy gums, teeth, and bones	• Citrus fruits and juices, • Strawberries, • Papaya, • Broccoli • Bell pepper • Potatoes • Tomatoes
Thiamin(B1)	1.4mg	• Raises levels of energy • Regulates the nervous system	• Whole grains, • Fortified cereals • Eggs • Rice • Pasta • Berries • Nuts • Legumes
Riboflavin(B2)	1.4mg	• Maintains energy, good eyesight, healthy skin	• Meats • Poultry • Fish • Dairy products • Fortified cereals • Eggs
Niacin(B3)	18mg	• Healthy skin, nerves, and digestion	• High-protein foods • Fortified cereals and bread • Meats • Fish • Milk • Eggs • Peanuts
Vitamin B6	1.9mg	• Formation of red blood cells • Reducing morning sickness	• Chicken • Fish • Eggs • Soybeans • Carrots • Cabbage • Cantaloupe • Peas • Spinach • Sunflower seeds • Bananas • Potatoes • Broccoli • Brown rice • Oats • Bran • Peanuts and walnuts
Vitamin B12	2.6mcg	• Important factor in DNA synthesis • Prevent fetus from neural tube defects (NTDs)	• Fish • Beef • Eggs • Dairy • Poultry

12

- Other than the vitamins and minerals listed, **Omega 3** and lutein are **essential during pregnancy.**



- Omega 3 is an essential fatty acid that the body doesn't produce which should be taken from different food sources such as salmon and sardines or even as a food supplement. **300 mg of DHA** is needed daily for pregnant woman as it is the building block of the fetal brain, eyes, and nervous system.[4] It also helps in preventing perinatal depression and supporting healthy postpartum mood and well-being for moms.[4,5]



- Lutein is a carotenoid that acts as an antioxidant. **It is present in leafy greens like kale and romaine lettuce, broccoli, zucchini, corn, carrots, okra, celery, oranges, tomatoes, melons, grapefruit, beet,** and asparagus. No daily recommendation has been set yet by global organization, however it was found to be beneficial in pregnancy by supporting healthy development of the retina and brain of the baby [6] and having an association with better offspring verbal intelligence and behavior regulation ability in mid-childhood.[7]



- Make healthy balanced eating from all the food groups as your goal and best mate during your pregnancy as **it will help you in getting all the necessary nutrients.** Consult with your doctor if you need to take any **vitamin supplement** if you feel you are missing on any essential vitamin from any food source.



REFERENCES

1- Nutrition During Pregnancy | ACOG

2- MicronutrientFactsheet_v10_Apr2020.pdf (cdc.gov)

3- Nutrition Recommendations in Pregnancy and Lactation (nih.gov)

4- https://americanpregnancy.org/healthy-pregnancy/pregnancy-health-wellness/omega-3-fatty-acids-faqs/

5- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3046737/

6- Maternal Lutein and Zeaxanthin Concentrations in Relation to Offspring Visual Acuity at 3 Years of Age: The GUSTO Study - PubMed (nih.gov)

7- Maternal Intake of Lutein and Zeaxanthin during Pregnancy Is Positively Associated with Offspring Verbal Intelligence and Behavior Regulation in Mid-Childhood in the Project Viva Cohort - PubMed (nih.gov)

Vitamins Needed for Pregnancy: Your Friendly Micronutrients

Eating well is one of the best things you can do during pregnancy, it will help in getting enough nutrients to support your health and your fetus's health.[1] Micronutrients which refer to vitamins and minerals, are key to important bodily functions and key to help infants and children grow, learn, and thrive.[2] Pregnant woman need more of folic acid, iron, zinc, calcium, vitamin D, vitamin A, choline, B vitamins, and vitamin C.[2,3] Here is a list of **vitamins needed for pregnancy**:

Vitamin/Mineral	Recommended daily amount	Role in your body and your fetus's body	Food and other sources
Iron	27mg	• Make extra blood needed by you and fetus • Growth and development of fetus's brain • Prevention of low birth weight, anemia, and premature delivery	• Beef • Beans • Spinach • Dried fruits • Oatmeal or grains fortified with iron
Zinc	11mg	• Immunity • Resistance to infection • Proper growth and development of fetus nervous system	• Red meats • Poultry • Beans • Nuts • Whole grains • Fortified cereals • Dairy products
Calcium	1000mg	• Reduce risk of Pre-eclampsia (medical condition where pregnant woman experiences a sudden increase in their blood pressure) • Build fetus strong bones and teeth	• Dairy products such as milk, cheese, yogurt • Broccoli • Fortified foods (cereals, breads, and juices) • Almonds and sesame seeds • Sardines • Dark green leafy vegetables

Vitamin D	15mcg	• Helps calcium in building fetus's strong and healthy bones and teeth • Essential for muscle and nerve functions, • Helps the immune system fight off bacteria and viruses, • Healthy eyesight and skin	• Sun exposure • Fortified milk and breakfast cereals • Egg yolks • Fatty fish such as salmon and sardines
Vitamin A	770mcg	• Fetus's growth of bones and teeth • Formation of healthy eyesight, skin, • Immune functions	• Milk • Eggs • Carrots • Spinach • Green and yellow vegetables • Broccoli • Potatoes • Pumpkins • Yellow fruits • Cantaloupe
Choline	450mg	Development of fetus's brain and spinal cord	• Chicken • Beef • Eggs • Milk • Soy products • Peanuts
Vitamin C	85mg	• Protects tissues from damage • Helps body absorb iron • Building a healthy immune system • Healthy gums, teeth, and bones.	• Citrus fruits and juices • Strawberries • Papaya • Broccoli • Bell pepper • Potatoes • Tomatoes
Thiamin(B1)	1.4mg	• Raises levels of energy • Regulates the nervous system	• Whole grains • Fortified cereals • Eggs • Rice • Pasta • Berries • Nuts • Legumes • Pork

Riboflavin(B2)	1.4mg	• Maintains energy, good eyesight, healthy skin	• Meats • Poultry • Fish • Dairy products • Fortified cereals • Eggs
Niacin(B3)	18mg	• Healthy skin, nerves, and digestion	• High-protein foods • Fortified cereals and bread • Meats • Fish • Milk • Eggs • Peanuts
Vitamin B6	1.9mg	• Formation of red blood cells • Reducing morning sickness	• Chicken • Fish • Eggs • Soybeans • Carrots • Cabbage • Cantaloupe • Peas • Spinach • Sunflower seeds • Bananas • Beans • Broccoli • Brown rice • Oats • Bran • Peanuts and walnuts
Vitamin B12	2.6mcg	• Important factor in DNA synthesis • Prevent fetus from neural tube defects (NTDs)	• Fish • Beef • Pork • Eggs • Dairy • Poultry

Other than the vitamins and minerals listed, Omega 3 and lutein are essential during pregnancy.

Omega 3 is an essential fatty acid that the body doesn’t produce which should be taken from different food sources such as salmon and sardines or even as a food supplement. 300 mg of DHA is needed daily for pregnant woman as it is the building block of the fetal brain, eyes, and

nervous system[4]. It also helps in preventing perinatal depression and supporting healthy postpartum mood and well-being for moms. [4,5]

Lutein is a carotenoid that acts as an antioxidant. It is present in leafy greens like kale and romaine lettuce, broccoli, zucchini, corn, carrots, okra, celery, oranges, tomatoes, melons, grapefruit, beet, and asparagus. No daily recommendation has been set yet by global organization, however it was found to be beneficial in pregnancy by supporting healthy development of the retina and brain of the baby[6] and having an association with better offspring verbal intelligence and behavior regulation ability in mid-childhood.[7]

Make healthy balanced eating from all the food groups as your goal and best mate during your pregnancy as it will help you in getting all the necessary nutrients. Consult with your doctor if you need to take any vitamin supplement if you feel you are missing on any essential vitamin from any food source.

References:

1. Nutrition During Pregnancy | ACOG

2. MicronutrientFactsheet_v10_April2020.pdf (cdc.gov)

3. Nutrition Recommendations in Pregnancy and Lactation (nih.gov)

4. https://americanpregnancy.org/healthy-pregnancy/pregnancy-health-wellness/omega-3-fatty-acids-faqs/

5. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3046737/

6. Maternal Lutein and Zeaxanthin Concentrations in Relation to Offspring Visual Acuity at 3 Years of Age: The GUSTO Study - PubMed (nih.gov)

7. Maternal Intake of Lutein and Zeaxanthin during Pregnancy Is Positively Associated with Offspring Verbal Intelligence and Behavior Regulation in Mid-Childhood in the Project Viva Cohort - PubMed (nih.gov)