Pregnancy nutrients for different stages of foetus development

PREGNANCY TIPS AND ARTICLES

ARTICLE

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Different stages of foetal development require different essential nutrients to ensure that your baby is growing and developing both physically and cognitively.

Folic acid, minerals and vitamins are essential for foetal development, especially the brain.

Early Pregnancy

The average length of pregnancy is 40 weeks. During this seemingly long period of time, the body goes through many changes. Learn what to expect and be aware of during different stages of foetal development. Nutrients required for foetus development include iodine, calcium, zinc and iron. These are the critical elements for the baby's bones, intelligence and body development.

Foetus development: Brain and neurons

Folic acid, minerals and vitamins are essential for foetal development, especially the brain. Let's look at all these critical nutrients in greater detail.

Critical Nutrients:

Folic Acid

Folic acid plays a critical role in your baby's neural development. It prevents babies from being born with neural tube defects. It is important that mothers consume enough folic acid in early pregnancy. The recommended intake of folic acid for pregnant mums is 600 mcg1 per day. Green vegetables, animal livers, eggs, beans

and nuts are rich in this nutrient. Each serving of S-26 $^{\circ}$ MAMA has 200 $\mu g2$ of folic acid.

Zinc

Zinc is critical for foetal central neural system development. Insufficient amount of zinc would slow the development of neural system, causing damage to cognitive process in the baby. The recommended intake of zinc is 11.5 mg3 per day. Foods like shellfish, red meat, offal, nuts, yeast, oat, or peanut, are rich in zinc. Each serving of S- 26° MAMA has 3.43 mg4 of zinc.

Iodine

Iodine is an important ingredient for the thyroid gland. Insufficient iodine during pregnancy would have an impact on your baby's cognitive and body development. The suggested intake of iodine during pregnancy is $200\mu g$ per day. You can find iodine in seaweed, fish or shellfish. Each serving of S-26® MAMA has $31.9\mu g5$ of iodine.

Vitamin B1 and B complex

Vitamin B complex in early pregnancy plays an important role for the mum's level of comfort and foetal development. Low intake levels of vitamin B1 and B6 could result in severe pregnancy sickness. Insufficient vitamin B1 may damage the neural system. The ideal intake of vitamin B1 every day is 1.4 mg, B6 is 1.9 mg, B2 is 1.4 mg, and B12 is 2.6 μ g6. The main sources of vitamin B complex are vegetables, fruit, beans, meat, nuts, wheat and offal.

Each serving of S- 26° MAMA has 0.39mg of vitamin B1, 0.5mg of vitamin B2, 0.58mg of vitamin B6, 1.44µg of vitamin B127.

Oligofructose

Oligofructose is also known as FCO. It helps increase the absorption of calcium and magnesium. FCO also promotes the growth of beneficial intestinal bacteria, which helps the digestion and bowel movement during pregnancy. Oligofructose is a type of sugar that comes from fibre that is often found in vegetables and fruit.

Choline

As your pregnancy progresses, the need for choline increases. Choline is crucial for the baby's brain and spinal cord development. The daily recommended intake of choline begins at 450 mg per day and increases to 500 mg8. You can find choline in egg, meat, fish, wheat germ and peanut.

Mid-Pregnancy

Mid-pregnancy is when your baby starts developing rapidly inside your womb. Starting from the 13th week, the foetus starts growing at a faster pace. There will be an advance development in brain, body parts and bone structure. This is the stage when babies demand a higher amount of nutrients. All the nutrients are consumed at a rapid pace. It is extremely important that mums have enough trace elements in their daily diet. These trace elements are the key ingredient for baby's bone, body, overall wellness and development.

Foetus development: Body and neural development

Critical nutrient: High quality protein

During this stage, it is very important to obtain enough high quality protein to enhance the baby's body and neural development. High quality protein has all the essential amino acids that the human body requires. For example, alpha-lactalbumin is a balanced, highly efficient protein critical for the human body. You can find high quality protein in animal protein, such as fish, chicken, egg, milk and lean meat. Other plant sources, such as high quality soybean protein are also good protein sources.

Foetus development: Prevent anaemia

Critical nutrient: Iron

Insufficient iron during pregnancy would cause iron deficiency anaemia. Severe lack of iron could affect foetal health. The suggested amount of iron during mid and post-pregnancy is 25-35mg per day. You can also find iron in red or white meat, liver and animal blood. Each serving of $S-26^{\circ}$ MAMA has 6.4mg of iron.

Vitamin C

Vitamin C boosts iron absorption in the body. During pregnancy, the ideal amount of vitamin C is 85mg9 per day. You can find vitamin C in fresh fruit and vegetables, such as cabbage, broccoli, green pepper, tomato, orange, strawberry, kiwi and fresh dates. Each serving of S-26® MAMA has 44.7 mg10 of vitamin C.

Foetus development: Vision development

Critical nutrient: Vitamin A

Vitamin A helps generate and reform photosensors in the sensory cells. Healthy sensory cells are critical for perfect vision. Vitamin A also boosts bone development and growth. The ideal amount of vitamin A during mid and post pregnancy is 770

µg11 per day. You can find vitamin A in offal, milk and egg yolk.

 $S-26^{\circ}$ MAMA contains Vitamin A that helps boosting baby's vision development. You can find Vitamin A in green vegetables, red and orange vegetables or fruit. Each serving of $S-26^{\circ}$ MAMA has 191 µg of Vitamin A.

Post pregnancy

Here comes the stage when mums provide the baby with a final boost of nutrition before delivery. This is also when the baby's organs and tissues grow at a rapid speed, especially the baby's brain cells. It's important that the mum provides enough DHA for the baby's brain development.

A balanced healthy diet helps ensure a smooth delivery. By slightly modifying your diet plans, cutting short on carbs, fat, or sugar would prevent the possibility of an oversized foetus.

Critical nutrient: DHA and vitamin A help boost the development of brain and retina.

Foetus development: Brain and vision development

Critical nutrient: DHA

During the post pregnancy stage, the DHA level in mums' blood is critical for the baby's brain and vision development. You can find DHA in fish, fish oil, shrimp, egg yolk, almond and walnut. Each serving of $S-26^{\circ}$ MAMA has 32.8 mg12 of DHA

Foetus development: Bone development

Critical nutrient: Calcium

Baby's bones start calcifying after 28 weeks into pregnancy. There will be a large increase in demand for calcium. Hence, it's important to make sure there is enough calcium in a mum's diet. The ideal amount of calcium during post pregnancy is 1200mg13 per day. You can find calcium in milk, sesame seed, dried shrimp, milk product, beans, seaweed and seafood. Each serving of S-26® MAMA has 343 mg14 of calcium.

Reference:

1. "Recommended dietary allowances - HealthHub." https://www.healthhub.sg/live-healthy/192/recommended dietary allowances

2. Source: Wyeth











