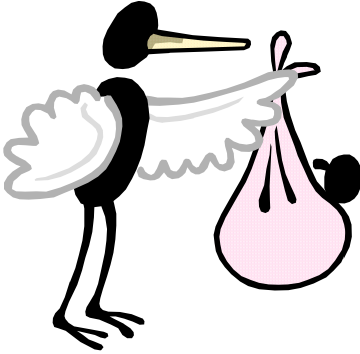


Pregnancy & Nutrition



Before starting a family, it is important to consider nutritional preparation for both the prospective mother and prospective father.

Proper pre-conception nutrition may assist in falling pregnant, help maintain a viable pregnancy and produce a healthy baby.

What follows is a list of pre-conception and during pregnancy guides for the prospective mother and a pre-conception guide for the prospective father.

Nutrition for the mum-to-be

Nutrient	How much & where to find it
Protein	<p>Protein is vital for the number and quality of eggs (ova) produced, the fertilisation process and early development of the embryo. Also essential to brain development and function of the baby. Essential amino acids are required to prevent mutations.</p> <p>High quality animal protein (lean meat, fish), yoghurt, seeds, nuts, sprouted grains, and free range eggs. <i>If vegan, protein combining is vital to receive adequate amounts.</i></p> <p>Avoid dyed, smoked or irradiated fish or meat products, bacon</p> <p>Upon conception, increase intake by 10 to 20% of good quality protein</p>
Vitamin A	<p>Lack of Vitamin A may hinder conception or lead to miscarriage, or in full term pregnancy may result in birth defects (cleft palates)</p> <p>Best source is Beta-carotene</p> <p>Food sources include fish liver oils; red, orange, dark green and yellow vegetables; orange fruits</p>
Vitamin B complex	<p>The B vitamins are important to keep the hormonal balance which is essential for the early development of the embryo and the smooth progression of the pregnancy</p>
Folic Acid	<p>Most important to be taken pre-conceptually as it is needed in the very early stages of pregnancy for the formation of organs.</p> <p><i>NB: replenish supplies of folic acid when coming off the Pill</i></p> <p>Food sources include asparagus, spinach, lentils, black-eyed peas, Romaine lettuce, broccoli, sunflower seeds, and cooked beets</p>

Nutrient	How much & where to find it
Pantothenic Acid	<p>Helps build body cells, supports normal growth and development of the central nervous system</p> <p>Readily available in most foods</p> <p>Food sources sunflower seeds, raw mushrooms, plain yoghurt, squash, peanuts, broccoli, baked potato, legumes, cooked egg yolk</p>
Thiamine (B ₁)	<p>Essential for maintaining pregnancy and preventing abnormalities.</p> <p>Food sources whole grains, nuts, seeds</p>
Riboflavin (B ₂)	<p>Insufficient amounts of riboflavin in the diet may lead to infertility or malformation of the embryo.</p> <p><i>NB: dairy free diets may be deficient in riboflavin</i></p> <p>Food sources milk, mushrooms, spinach, whole grains, broad beans</p>
Pyridoxine (B ₆)	<p>Increases chances of conception</p> <p>Food sources animal protein foods, spinach, potatoes, bananas, salmon, sunflower seeds</p>
Cobalamin (B ₁₂)	<p>Enhances fertility; deficiency may cause spinal cord damage in infant.</p> <p><i>NB: vegetarians beware as main source is animal products</i></p> <p>Food sources animal foods (meat, fish, dairy, eggs)</p>
Vitamin C	<p>Assists with ovulation, heavy bleeding and infertility. Necessary for a continuing pregnancy</p> <p>If using supplements, ensure they contain bioflavonoids (rutin, hesperidin, quercetin, Vitamin P) to assist with absorption</p> <p>Food sources citrus fruits, strawberries, broccoli, green vegetables</p>
Vitamin D	<p>Essential for growth of bones, teeth, calcium and phosphorus absorption. A deficiency is a factor in deformities</p> <p>Sources sunshine (converted to Vitamin D by our body); milk, fish oils</p>
Vitamin E	<p>Known as the 'fertility vitamin' as it ensures conception and a healthy pregnancy and facilitates easy delivery.</p> <p>Food sources plant oils, nuts, seeds, cabbage, spinach, asparagus, broccoli, whole grains, rice, oats, peanuts</p>

Nutrient	How much & where to find it
Essential fatty acids	<p>Required for the development of the child's brain, nervous system, walls of all cells and the baby's body functions. Can protect against cot death.</p> <p>Food sources flax seed oil, fish oils, sesame seed oil, spirulina, soy beans, lecithin, mackerel, sardines, tuna, salmon</p>
Calcium	<p>Essential for the development of baby's bones, uterine muscle tone, assists with conception.</p> <p>Food sources sardines, molasses, vegetables (peas, beans, cauliflower), milk, dairy products</p>
Zinc	<p>Improves reproductive tone, normal egg production.</p> <p>Food sources meat, fish, seeds, wheat germ, onions, maple syrup, mushrooms, whole grains, nuts, peas, carrots, herring, oysters, tomatoes</p>
Magnesium	<p>Important for muscle tone and hormonal balance. Deficiency may lead to retarded foetal development, miscarriage or low birth weight. Essential to avoid toxemia in later pregnancy</p> <p>Food sources whole grains, green vegetables, nuts, seafood</p>
Manganese	<p>Essential for viable pregnancy, bone, heart and nervous system</p> <p>Food sources leafy vegetables, peas, beans, whole grains, nuts</p>
Iodine	<p>Essential for thyroid function, hormone balance; deficiency may lead to cretinism. NB: like copper and iron dangerous in excess (RDA 150 µg).</p> <p>Food sources iodised table salt, plain yoghurt, buttermilk, eggs</p>
Iron	<p>Essential for the baby's blood stream, brain, bone and eye development and rate of growth as well as for general fertility</p> <p><i>NB: if using a supplement DO NOT use ferrous oxide, Haem 100 is suitable for pregnancy as is the mineral form of Iron Phosphate</i></p> <p>Food sources meat, organ meats (liver, kidney), eggs, leafy green vegetables</p>
Copper	<p>Infertility problems.</p> <p>Most urban dwellers have sufficient (or too much) If in doubt,</p>



	<p>have a blood test</p> <p>Food sources whole rice, liver, cauliflower, chocolate, kale, molasses, mushrooms, green peas and beans, peanuts, walnuts, oysters, soy beans, wheat germ, bran, seeds, lobster, crab</p>
Trace minerals	<p>These include boron, selenium (antioxidant) and chromium (blood sugar). Deficiencies have been linked with cot death and Down's syndrome.</p> <p><i>NB: all mineral supplements should be chelated</i></p>

Always seek the advice of a qualified health care professional before supplementing to avoid possible nutritional imbalances.

Supplement only with quality products – synthetic vitamins are useless and may be harmful.

Avoid mega-vitamins as:

- high levels of folic acid can mask a B₁₂ deficiency;
- too much B₆ can be toxic and lead to numbness in hands and feet;
- too much copper can decrease zinc levels and fertility;
- too much Vitamin A is toxic (no more than 10,000 iu per day);
- too much iron affects zinc absorption;
- too much phosphorus increases the need for calcium;
- too much manganese makes your mucous 'sticky'.

Avoid alcohol, caffeine, refined carbohydrates, saturated fats, chemicals and additives, processed (delicatessen) meats, green potatoes (contain mutagenic substance), soft drinks.

Limit processed foods – energy should be in the form of complex carbohydrates

Limit salt, sugar, dairy products.

Eat lots of fresh fruit and vegetables, whole grains and plenty of protein – **organic is best.**

Regular exercise.

Nutrition for the dad-to-be

Nutrient	What for & where to find it
Protein	<p>Protein is vital for optimum functioning of the testes, sperm production, viable sperm and the fertilisation process.</p> <p>High quality animal protein (lean meat, fish), yoghurt, seeds, nuts, sprouted grains, and free range eggs.</p> <p>Avoid dyed, smoked or irradiated fish or meat products, bacon</p>
Zinc	<p>Vital for viable sperm count, motility and high percentage of live sperm in the semen. This is the <i>most important</i> mineral for male reproductive health.</p> <p>Take daily for at least four months before conception.</p> <p>Food sources meat, fish, seeds, wheat germ, onions, maple syrup, mushrooms, whole grains, nuts, peas, carrots, herring, oysters, tomatoes</p>
Manganese	<p>Deficiency can lead to a total lack of sperm</p> <p>Food sources leafy vegetables, peas, beans, whole grains, nuts</p>
Potassium	<p>Deficiency can reduce sperm motility</p> <p>Food sources fruits, fresh fruit juices, whole grains, vegetables, bananas</p>
Magnesium	<p>Important for healthy sperm</p> <p>Food sources whole grains, green vegetables, nuts, seafood</p>
Calcium	<p>Although the male need is not as high as female, you still need a good amount every day</p> <p>Food sources sardines, molasses, vegetables (peas, beans, cauliflower), milk, dairy products</p>
Chromium	<p>Important with regard to blood sugar levels</p> <p>Food sources brewer's yeast, mushrooms, black pepper, liver, beef, whole grains, beets, beer</p>
Selenium	<p>Deficiency decreases sperm production and mortality and can lead to deformities (including Down's syndrome). Lost through frequent ejaculation</p> <p>Food sources tuna, herring, bran, brewer's yeast, wheat germ, broccoli, eggs, onions, garlic, liver, cabbage, tomatoes</p>
Essential fatty acids	<p>Deficiency can lead to general impairment of testicular function and even chromosome defects. Males need more than females.</p> <p>Food sources flax seed oil, fish oils, sesame seed oil, spirulina, soy beans, lecithin, mackerel, sardines, tuna, salmon</p>



Nutrient	How much & where to find it
Vitamin A	<p>Needed for sperm production, healthy testes and conversion of cholesterol to testosterone</p> <p>Food sources include fish liver oils; red, orange, dark green and yellow vegetables; orange fruits</p>
Vitamin B complex	<p>The particular B vitamins needed are B₅ for healthy testes and B₁₂ to increase sperm count and motility. All B vitamins are useful and will help counteract stress reactions. Always take balanced B vitamin formula if supplementing.</p>
Vitamin C	<p>Necessary to prevent sperm clumping which causes infertility. Good levels can protect against genetic abnormalities and increase sperm motility. Take with bioflavanoids (vitamin P)</p> <p>Food sources citrus fruits, strawberries, broccoli, green vegetables</p>
Vitamin E	<p>Required for good sperm count. Deficiency can lead to total lack of sperm.</p> <p>Food sources plant oils, nuts, seeds, cabbage, spinach, asparagus, broccoli, whole grains, rice, oats, peanuts</p>
Protein	<p>Necessary for the optimum functioning of testes and good source of amino acids. Deficiency can lead to chromosome aberrations.</p> <p>Food sources high quality animal protein (lean meat, fish), yoghurt, seeds, nuts, sprouted grains, and free range eggs. <i>If vegan, protein combining is vital to receive adequate amounts.</i></p>

Eat lots of fresh fruit, vegetables and whole grains – **organic** is best

Reduce intake of refined carbohydrates, animal fats, salt, sugar, dairy products

Don't smoke (nicotine can lead to atrophy of the testicles, low sperm count, poor motility and deformities)

Little or no alcohol (perhaps an occasional standard glass of wine or beer)

Avoid coffee, chemicals, additives, medication, drugs, artificial sweeteners (soft drinks)

Regular exercise

Note: heat and pressure kill sperm. Avoid hot baths.