



Trans fat link to fertility

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Women who want to get pregnant may want to stay away from fast-food and french fries — and not just to avoid putting on extra kilograms.

The more trans fats a woman eats, the more likely she is to be infertile, Jorge Chavarro of the Harvard School of Public Health in Boston and colleagues found.

Trans fats are found in fried foods, packaged snacks, commercial baked goods and other sources, and are known to increase the risk of heart disease and diabetes.

"Even for somebody who's not trying to get pregnant, it is a very good idea to stay away from them," Dr Chavarro said.

Trans fats can interfere with the activity of a cell receptor involved in inflammation, glucose metabolism and insulin sensitivity, Dr Chavarro and his team note in the American Journal of Clinical Nutrition.

Drugs that activate the receptor have been shown to improve fertility in women with a condition known as polycystic ovary syndrome.

The researchers analysed data from 18,555 healthy US women participating in the Nurses Health Study to investigate how trans fat consumption might affect fertility. All were married and trying to get pregnant between 1991 and 1999.

For every 2 per cent increase in the calories a woman got from trans fats instead of carbohydrates, the researchers found, her risk of infertility



increased by 73 per cent. The risk rose by 79 per cent for every 2 per cent of energy in trans fats if they replaced omega-6 polyunsaturated fats. And for every 2 per cent of calories derived from trans fats instead of mono-unsaturated fats, the risk of infertility more than doubled.

For a woman eating 1800 calories a day, 2 per cent of energy intake in trans fats equalled four grams, Dr Chavarro noted. "It's not very hard to get four grams of trans-fatty acids every day," he said.

"It's really a small amount of trans-fatty acids that we observe having a significant effect on infertility."

The essential fatty acids linoleic acid and alpha-linolenic acid are essential to every living cell in the body. They are also key in ovulation, specifically in the process of follicular rupture (releasing the egg) and collapse (allowing the development of the corpus luteum). Good sources of essential fatty acids are fish, fish oil, nonhydrogenated cold-pressed oils such as flaxseed and pumpkin-seed oils, eggs, soy products, raw nuts and seeds, and dark-green and winter vegetables like broccoli, cauliflower, beets, carrots, kale, collards, cabbage, turnips, rutabaga, and Brussels sprouts.

Be aware, however, that with long-term exposure to heat and light, essential fatty acids found in vegetable oils may become trans fatty acids, which are toxic. Trans fatty acids can impair the proper functioning of the immune and reproductive systems. Other sources of trans fatty acids are shortening, margarine, lard and animal fat, and hydrogenated vegetable oils, which are found in many processed foods. Do your best to stay away from trans fatty acids in your diet. Store oil in a cool, dry place, and once it's open, use the oil within a couple of months.

Another key fatty acid, omega-3, is found in deep-sea fish oil. Omega-3 fatty acids have been found to clean the blood of fat deposits, reduce clotting, and encourage blood flow to the tissues, including the uterus. Omega-3 fatty acids also boost the immune system and have been found to reduce certain immune cells (NK, or natural killer, cells) which prevent the embryo's implantation in the uterus. The omega-3 fatty acids eicosapentaenoic acid



(EPA) and docohexaenoic acid (DHA) are also essential in fetal brain development.

NOTE: Be aware that elevated levels of mercury can be found in many deep-sea fish. Some companies do ensure purity standards for their fish, guaranteeing low or no toxic metals.

Add more cruciferous vegetables like cabbage, broccoli, Brussels sprouts, and cauliflower to your diet. Cruciferous vegetables contain di-indolylmethane (DIM), a compound that stimulates more efficient use of estrogen by increasing the metabolism of estradiol (one form of estrogen produced by the body). Excess estradiol is associated with breast pain, weight gain, breast and uterine cancer, moodiness, and low libido. Adding DIM sources to your diet allows the estradiol to break down into the beneficial 2-hydroxy estrogens, which don't have estradiol's negative effects.

Supplement your diet with a natural, high-potency multivitamin and mineral complex with iron, folic acid, and B vitamins. The vitamins and minerals important for reproductive health (vitamins A, C, E, B complex, zinc, and selenium) enhance fertility yet are lacking in the usual Western, highly processed diet. If these nutrients were adequately supplied through the diet, many fertility problems could be avoided. Other supplements you might wish to try include the following:

Bee pollen and/or royal jelly is regenerative and tonifying. Bogdan Tekavcic, M.D., a Yugoslavian gynecologist, conducted a study in which the majority of women who were given bee pollen with royal jelly showed improvement or disappearance of their menstrual problems, while there was no change in the placebo group. Another study showed bee pollen significantly improved sperm production in men. Bee pollen, which is worker bee food, is rich in vitamins, minerals, nucleic acids, and steroid hormones, and improves health, endurance, and immunity. Royal jelly is modified pollen fed only to the reproducing queen bee, whose job it is to produce more infant bees.

This nutritive tonic might be considered the bee equivalent of fertility drugs. Rich in amino acids, vitamins, and enzymes, royal jelly helps the queen lay millions of eggs and live longer than the worker bee.



Blue-green algae is the origin of life-giving nourishment on this planet. Microalgae contains chlorophyll, amino acids, minerals, vitamins, and steroid building blocks. Chlorella is freshwater green algae; spirulina is saltwater blue-green algae. Chlorella and spirulina nourish the endocrine, nervous, and immune systems; tonify Qi, Blood, and Essence; regulate metabolism; and repair tissue.

Wheatgrass is tonifying and curative. It nourishes Qi, Blood, and Essence, enhances immunity, and restores hormonal functioning. Other cereal grasses like barley grass function the same way.

Vitamin B6 helps the body metabolizes excess estrogen, produce adequate progesterone, and lower elevated prolactin levels. A Harvard study treated women with galactorrhea (lactation not associated with childbirth or nursing)/amenorrhea syndrome with 200 to 600 milligrams of vitamin B6 daily. Within three months all the women in the study had normal menstrual cycles and had stopped lactating.

Coenzyme Q-10 assists mitochondrial function, the powerhouse of each cell.

Folic acid is extremely important in cellular division. I am a proponent of supplementing your diet with folic acid for months before you conceive and throughout pregnancy. You should be aware that the adult daily minimum requirement for folic acid advocated by the Food and Drug Administration (FDA) is well below the amount we actually should take. If you have a history of abnormal cell division, such as cervical dysplasia, you should eat foods with high folic acid content, like dark-green leafy vegetables and natural orange foods - oranges.

