

# Healthy diet, better chances

We all are aware that a good diet is essential for overall health. When trying to get pregnant it is even more important to ensure that you are getting the nutrients required to develop healthy sperm and eggs and to support a healthy foetus. A healthy diet helps to keep your weight within range, enhancing your chances of having a baby and can also help correct hormone imbalances that may affect your ability to conceive.



While you are trying to conceive, you and your partner should try to improve your lifestyle and diet. Eating a wide range of healthy foods will help get you on your way. However, there are some nutrients that are particularly important for fertility, including Omega 3, vitamin D, zinc, selenium and other antioxidant nutrients. The optimal amount of these nutrients can vary, and depends on dietary intake, pre-existing medical conditions, and results of investigations performed during reproductive health testing.

## Omega 3 Fatty Acids

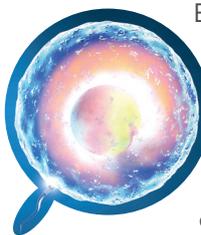
These essential fats have a profound effect on making healthy cells and promoting hormone function. Research in the field of immunology identifies the strong supporting role these fats play in helping to balance the immune system and maintain a pregnancy<sup>i</sup>. They are also important for women with PCOS, helping to support insulin metabolism<sup>ii</sup>.

Studies have also shown their effect on male fertility, supporting higher antioxidant activity, improved sperm count along with motility and morphology<sup>iii, iv</sup>.

**Sources of Omega 3:** Oily fish such as salmon, mackerel, sardines are the best sources. Aim to eat at least 3 times. Other sources include pumpkin seeds, chia seeds, walnuts and ground linseeds. If buying a fish oil supplement, look for good levels of the active omega 3 constituents, EPA and DHA rather than the total fish oil on the label.

## Folic Acid + B Complex

It is well known that folic acid can prevent neural tube defects in your baby, and it is essential that you get plenty both before and during pregnancy. Certain medications or medical conditions may also increase your folic acid requirements. Low levels of folate can also lead to homocysteine accumulation. A high level of homocysteine in the blood makes a person more prone to inflammation in the blood vessels and can be linked to early pregnancy loss.



Folic acid is part of the very important B-complex family of vitamins that are necessary to produce healthy genetic material in both the egg and sperm.

All of the B vitamins are essential during the preconceptual period and should ideally be taken as a complex, rather than individually.

## Vitamin D

Vitamin D is produced in the skin by exposure to the sun and assists in absorption of calcium and in immune function. Optimum levels of Vitamin D have been associated with improved sperm quality and quantity<sup>v</sup>. For women, sufficient Vitamin D has been shown to help to maintain a pregnancy and sufficient levels are associated with better IVF outcomes<sup>vi</sup>. Oily fish and eggs contain small amounts of vitamin D. However few foods contain sufficient amounts and many people in Ireland have low levels, so supplementation is often needed. If you are supplementing Vitamin D ensure to take vitamin D3 (Cholecalciferol), ideally in liquid form. Excess vitamin D can be stored in the body, so it is recommended that you have your levels tested, as high levels can be harmful.

Antioxidant nutrients like vitamins A, C, E, zinc, selenium and CoQ10 help to protect delicate cells from free radical damage which can lead to damaged, poor quality eggs and sperm. Research shows improved pregnancy rates with appropriate levels<sup>vii</sup>.

## CoQ10

Coenzyme Q 10 is a vitamin-like substance that acts as an antioxidant, helping to protect cells from damage caused by normal everyday living and exacerbated by stress, pollution and nutrient deficiencies. A significant body of research shows it can help with sperm quality, quantity and motility<sup>viii</sup>, and it is also believed to support egg quality in older women, where the mitochondria may not function adequately.

## Zinc

Zinc is considered one of the most important nutrients for fertility. For women, zinc is needed to ensure production of mature eggs for fertilisation, to maintain proper follicular fluid levels, for uterine health and for regulation of hormones throughout the menstrual cycle. For men, zinc is vital for sperm production. Sufficient levels boost sperm count, motility and quality<sup>ix</sup>. Good food sources of zinc include oysters and other shellfish, pumpkin seeds, sesame seeds, beef, lamb, venison, yoghurt, turkey, peas.

# Selenium

Selenium is another natural antioxidant which helps protect against chromosomal damage – a contributing factor to birth defects and miscarriages. It is best known for its critical role in sperm formation and motility<sup>x</sup>. However selenium also plays an important role in female fertility, helping regulate thyroid and immune function, supporting the development of healthy follicles. Low levels are associated with recurrent miscarriage<sup>xi</sup>. It is important not to take too much selenium as high doses can be toxic to the body. Foods rich in selenium include wheat germ, brazil nuts (3 – 4 nuts daily is enough), mackerel, cashews, garlic, barley, wholegrain bread, oats and crab.



## Vitamins C & E

Vitamin C helps protect sperm from oxidative stress, improves quality and appears to prevent sperm agglutination (clumping). In women with PCOS it can help regulate the cycle. Vitamin C is sensitive to cooking and processing so it is best to eat at least some Vitamin C rich foods in raw form, fresh and straight after preparation to get the most benefit. Foods sources include citrus fruits, peppers, spinach, berries, parsley, broccoli, Brussel sprouts, kiwi fruit, cauliflower, kale, red cabbage. Vitamin E works together with Vitamin C to protect egg and sperm quality<sup>xii</sup> and enhance fertility and can be found in sunflower seeds, wholegrains, avocados, tomatoes, almonds and other nuts, spinach and other green leafy vegetables. Be aware that vitamin E has blood thinning properties and should not be taken in supplement form during IVF treatment where anti-coagulants are used.



## Iron

It is important for women to have good levels of iron while trying to conceive and during pregnancy. However too much iron is unhelpful and you should only supplement iron if blood tests show that this is required. Symptoms of iron deficiency include fatigue, breathlessness, dizziness and unusual pallor and if you experience these or have previously had low iron levels, you should have your iron levels checked. If you do need to take an iron supplement, look for iron in easily absorbable forms e.g. iron citrate or iron phosphate, particularly if you have found iron supplements to cause constipation in the past.



## Should I take supplements?

Supplements should always be supplementary to a healthy diet. At **Glenville Nutrition** we recommend that you avoid taking high dose single nutrients for long periods, as too much of a nutrient can be as damaging as too little. Taking a multivitamin designed for the preconception period can be helpful. Ideally have your nutrient levels tested to identify what you need.

If you do take a supplement, always check that it is suitable for use while trying to conceive as some supplements are not recommended during this period. This includes any supplements containing vitamin A at levels of more than 750 iu. Always inform your doctor of any nutritional supplements you are taking and avoid taking herbs while undergoing IVF treatment unless your doctor has agreed to this.

## Top tips for boosting fertility:

- a Mediterranean-style , low glycaemic index diet high in vegetables, wholegrains, fish, pulses, healthy fats and low in sugar will benefit both your waistline and your fertility
- limit the amount of sugar and sweet foods you eat, as this contributes to weight gain and can displace healthier foods in your diet
- avoid drinking alcohol while trying to conceive. For both partners, conception levels may reduce with more than 5 units (1/2 bottle wine) per week
- drink plenty of water – ideally 1.5 litres daily
- get some gentle exercise. This helps to support optimal weight and reduce stress levels

**If you need additional advice on food or supplements ask your Sims nurse or doctor or contact Glenville Nutrition at [info@glenvillenutrition.ie](mailto:info@glenvillenutrition.ie) / 01 4020777.**



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**Glenville Nutrition clinics work in collaboration with Sims IVF clinics for nutritional support**

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