

Lifestyle and Dietary Recommendations for Sperm-related Infertility

Reduced sperm parameters (sperm count and movement) account for up to 50% of all causes of infertility, and this percentage appears to be increasing worldwide. Patients with sperm-related infertility may be able to improve the chances of pregnancy by adjusting certain lifestyle factors. These adjustments can take at least 3 months or more to result in improved sperm parameters, and even when lifestyle is optimized, sperm parameters sometimes remain low. The current evidence about how lifestyle measures impact sperm parameters is limited for several reasons – poor study designs, very few studies reporting live birth rates, high dropout rates among participants and low sample sizes. Therefore, there is no guarantee that following the recommendations below will improve sperm parameters. There is no harm in trying lifestyle modification, and the recommendations are good for your overall health and general well-being.

If your sperm count and/or movement (motility) is low, your physician at OFC may recommend hormone testing, genetic testing, a scrotal ultrasound or physical exam, or referral to our urologist. Sperm levels can vary over time, so repeating a semen analysis is also helpful to monitor changes. Please consider the following recommendations to help optimize your fertility.

Lifestyle Recommendations:

- Avoid excessive heat (hot tubs, saunas, etc.). The testicles are an external organ in the scrotum, kept 2°C lower than 37°C body temperature for a reason. Frequent increases in scrotal temperature can contribute to reduced sperm count. Hot showers are okay, because the testicles are not submerged.
- Limit caffeine intake to 1-2 cups/day
- Avoid tobacco/smoking/vaping (cigarettes have been found to decrease sperm production, reduce DNA repair and alter testosterone levels)
- Limit alcohol consumption (no more than 2 units of alcohol twice per week)
- Avoid marijuana and other recreational drugs (studies have demonstrated that cannabis has a negative impact on volume, sperm count, morphology, motility and fertilization capacity as well as reduced blood testosterone levels)
- Exercise regularly – studies have demonstrated increased rates of low sperm count in those who are overweight. Some studies have demonstrated reduced sperm DNA damage and improved sperm count in patients following a routine exercise program.
- Maintain good nutrition – more PUFAs (polyunsaturated fats), more fruits and leafy green vegetables, less red meats, less processed foods

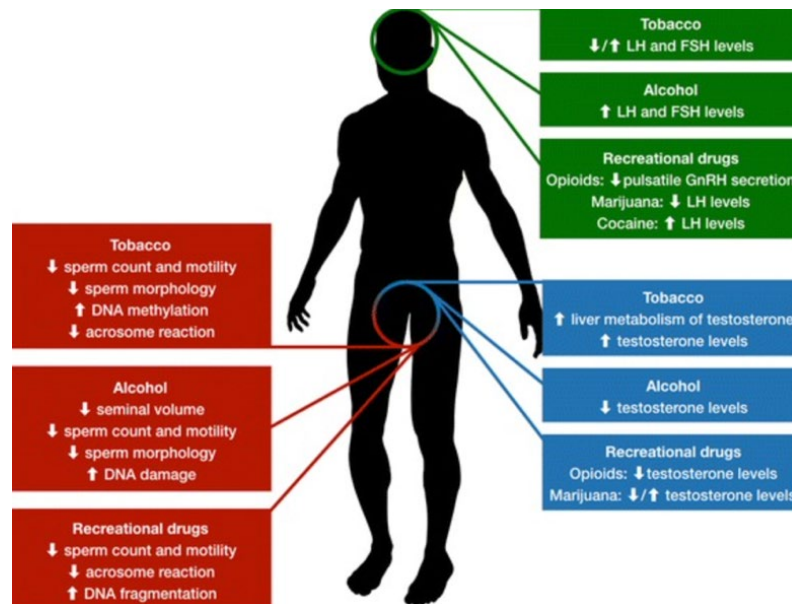
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Vitamins and Supplements

Sperm can be damaged by oxidative stress in the body which cause breaks in DNA molecules in sperm as it moves along the reproductive tract. Various vitamins and supplements have been studied and although taking them does not guarantee a major improvement in sperm health, they can be of benefit. Side effects of vitamins are typically minimal, but can include gastrointestinal upset.

- Coenzyme Q10
- Vitamin C
- Selenium
- Folic Acid
- Omega 3 Fatty Acids
- L-Carnitine

These supplements may be taken separately, or in combined form, with some vitamins specifically marketed and tailored for sperm factor infertility.



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