Male Fertility Report: A Practitioner's Guide

Infertility affects 20-30% of couples globally, with **50% ascribed to men** due to defects in sperm quantity, quality, or motility.[1] While common diagnoses exist, a growing body of evidence points to the crucial role of modifiable factors such as **nutritional patterns, body weight, oxidative stress, psychological and emotional stress, and inflammation.**

Research indicates that a high percentage of male infertility cases are influenced by lifestyle and environmental factors. A recent meta-analysis of 223 studies across 53 countries, analysing nearly 50 years of data (1973-2018), revealed an alarming trend: a rapid global decline in sperm concentration. Even more concerning, researchers found that the rate of **sperm concentration loss has been accelerating and doubled yearly starting after the year 2000.**[2]

Dietary factors profoundly influence fertility outcomes. A diet high in sugar, processed red meat, refined carbohydrates, saturated fatty acids, and artificial sweeteners, and low in omega-3 fatty acids, monounsaturated fatty acids, antioxidants, fruits, and vegetables have all been shown to drastically impact fertility due to elevated oxidative stress levels.

The Critical Role of Oxidative Stress and Broader Health

During natural conception or routine IVF, **oxidative damage to the sperm membrane can block fertilisation**, preventing the damaged paternal DNA from creating an embryo. The risk is even higher in obese men with diabetes, dyslipidemia, or metabolic syndrome. [3]

Furthermore, men with poor semen quality are at a greater risk for testicular cancer, cardiovascular disease, and a reduced lifespan. Screening for poor semen quality from genetic susceptibilities and other fertility testing may not only serve as advanced tools for increasing fertility rates, but also for optimising men's health and longevity. [4]

Key Genetic Markers Analysed

Our **Men's Fertility Panel** is a truly personalised and evidence-based approach to male infertility. This panel analyses **24 genes** that influence the most significant factors affecting male fertility, **including sperm production, motility, morphology, DNA integrity, hormone balance, and overall reproductive health.**

Report Highlights:

Sperm Count & Concentration
Sperm Motility
Sperm Morphology
Sperm DNA Integrity
Oxidative Stress Protection
Hormone Balance
Inflammation

Key Nutrients Assessed:

- **Nutrients:** Vitamin C, Vitamin E, Zinc, Folate, Vitamin B12, Vitamin D, Selenium, Omega-3 Fatty Acids, Coenzyme Q10, L-Carnitine, Arginine, Glutathione, N-acetylcysteine, Lycopene, Antioxidants.

Addressing Environmental Exposures

The rapid acceleration of environmental toxin exposure over the past five decades is hypothesized to be a leading cause of the global decline in sperm count and concentration, poor motility, and morphology. Exposure to **pesticides, herbicides, heavy metals, phthalates, and BPA plastic** can impair spermatogenesis, reduce sperm concentration and motility, and increase sperm DNA damage

- **Environmental Factors (impact assessed):** Pesticides, Herbicides, Heavy Metals, Phthalates, BPA, Radiation, Heat Exposure, Electromagnetic Fields.

Insights from this report, can identify underlying genetic predispositions, specific nutrient needs, and environmental vulnerabilities unique to each patient, allowing tailored and targeted interventions that may support improved fertility and overall health.

Take the Next Step in Personalized Health

Contact us today to learn more.

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References:

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