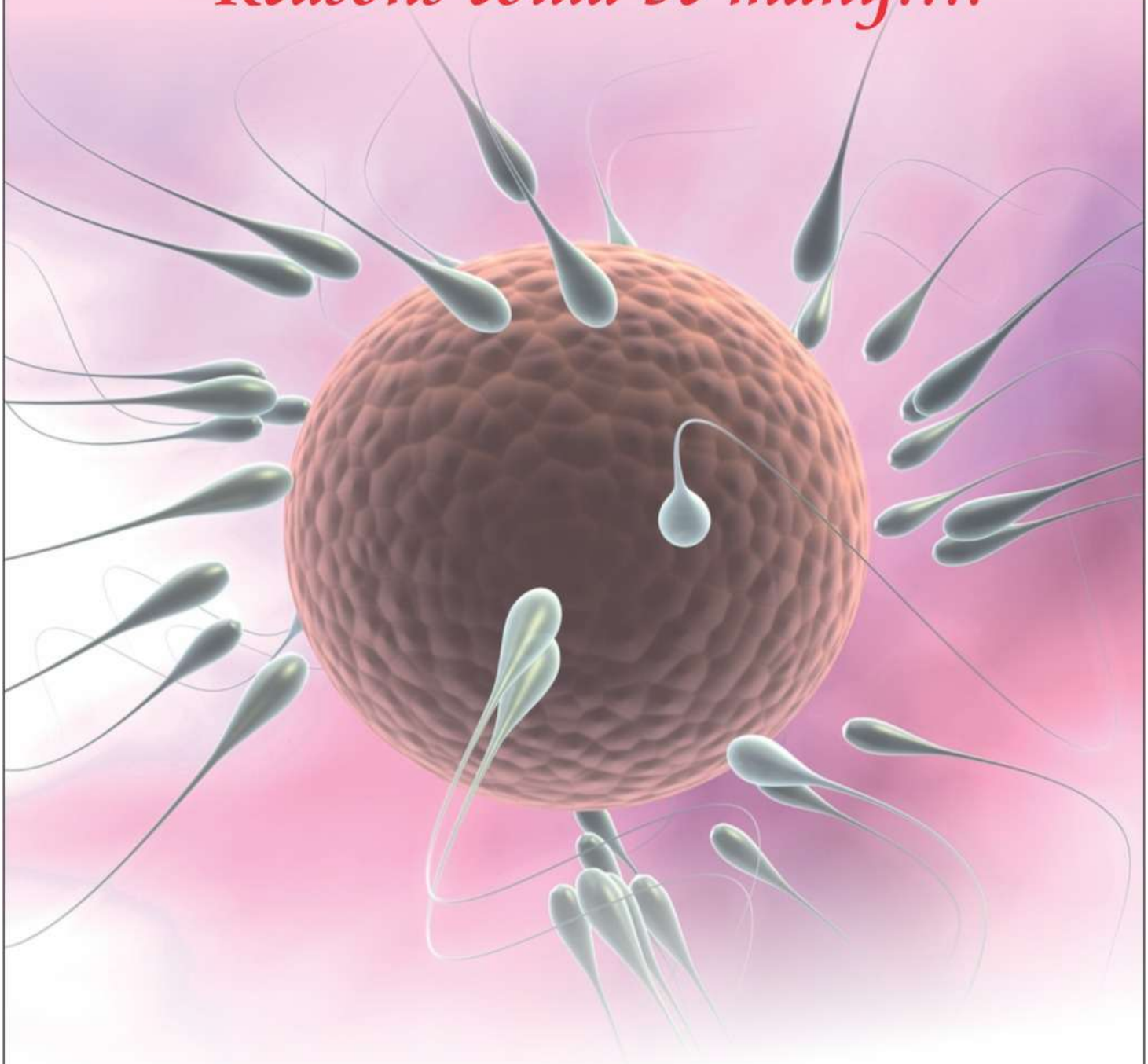
Male infertility !

nrf Medflux

Reasons could be many....



- Less sperm motility
- Low sperm concentration
- Low sperm count
- Abnormal sperm morphology

Introducing

Scientific..Time tested & Comprehensive Solution..

In the Management of Male Infertility

JOYFLUX-L

L-Carnitine 1000mg + Acetyl L-Carnitine 500mg + Coenzyme Q 10 100mg + Lycopene 2.5mg
Zinc 6mg + Folic Acid 50mcg + Selenium 20mcg + Vitamin B12 0.5mcg Sachet

POWER OF RED

L-Carnitine : Improves sperm count & motility & boost testosterone levels

Acetyl L-Carnitine : Improves sexual performance & sperm count & motility

Coenzyme Q 10 : Improves sperm count & motility & treats male infertility

Lycopene : Improves sperm motility, count, concentration & morphology

Vitamin B12 : Improves sperm parameters, & treats premature ejaculation

Zinc : Improves sperm parameters, increases testosterone production & libido

Folic Acid : Treats sexual dysfunction

Selenium : Increases sperm motility & sperm count

- Defective sperm function is considered to be the most common cause of male infertility
- Apart from all the conventional causes of male infertility, the major cause is idiopathic male infertility
- Major cause of idiopathic male infertility is free radical induced damage to the sperm
- Reactive Oxygen Species is one of the major contributors to male infertility & causes damage to the sperm's cell membrane, DNA molecules, lipids and proteins

Nutrition plays vital role in maintaining male fertility

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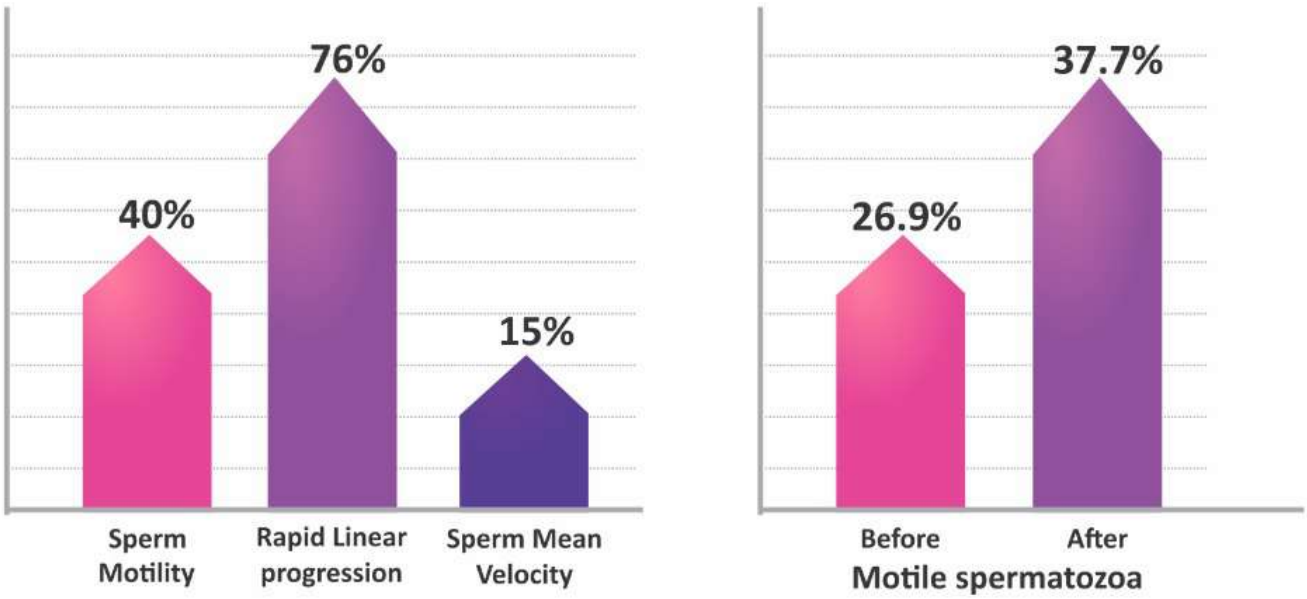
L-CARNITINE[1-4]

Three compartments of the male genital tract epididymal tissue, seminal plasma and spermatozoa maintains the highest free L-carnitine concentrations in the body.

- The main function of L-Carnitine in the epididymis is to provide an energetic substrate for spermatozoa
- L-Carnitine is involved in the successful maturation of sperm
- L-Carnitine is necessary for transport of fatty acids into the mitochondria to produce energy
- Low levels of L-Carnitine reduces fatty acid concentrations within the mitochondria, leading to decreased sperm motility

L-Carnitine Improves Sperm Motility

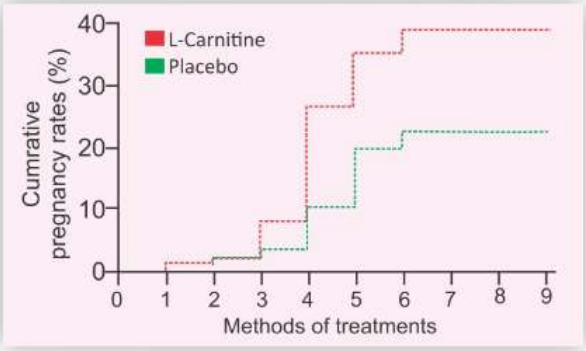


L- Carnitine reduces oxidative stress

L=Carnitine exerts antioxidant properties as a result of repairing mechanism by which elevated intracellular toxic acetyl-CoA is removed and fatty acids in membrane phospholipids are replaced.

L- Carnitine for asthenospermia with varicocele

There was significant improvement in sperm count, motility and pregnancy rates in infertility due to varicocele.



L- Carnitine improves sperm survival

There is a strict correlation between intrasperm L-carnitine content and sperm motility survival in cervical mucus. This is due to the fact that lipids are an important energy source for sperm in cervical mucus and to metabolize these lipids intrasperm L-carnitine is essential.
L-carnitine not only helps in lipid metabolism but also it modulates the reserves of free CoA, essential for tricarboxylic acid cycle regulation.
Therefore, L-Carnitine content can be considered as an indicator of sperm motility life span in cervical mucus.

ACETYL L-CARNITINE[5-7]

Acetyl-L-Carnitine improves the sperm count, motility & morphology

- Enhances sperm motility, their ability to swim speedily and in an appropriate direction.
- Acts as an antioxidant, protecting spermatozoa against damage from reactive oxygen species.
- Ensures that more sperm are produced with normal anatomy, or morphology.
- Increase testosterone production and improves testicular function, ultimately boosting healthy sperm count.

Combined L-Carnitine and Acetyl-L-Carnitine improves sperm vitality, sperm motility and the total sperm count per ejaculate

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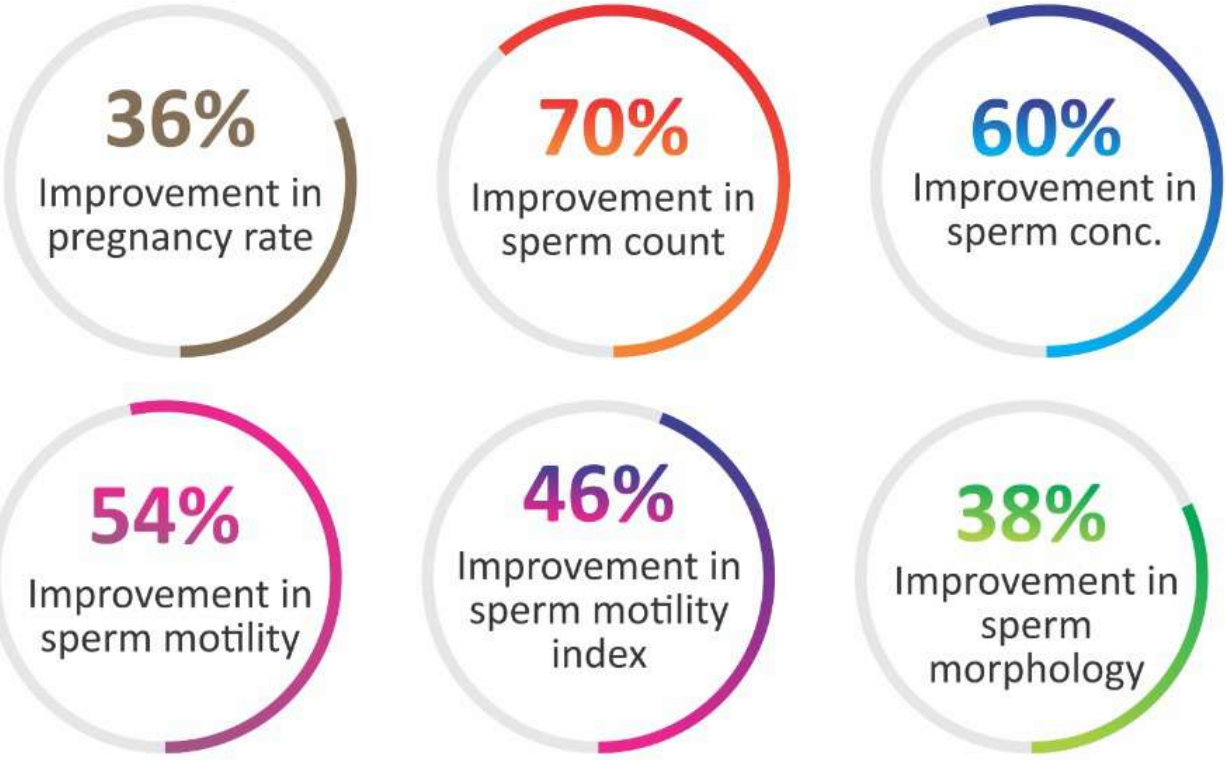
CO-ENZYME Q 10[8-16]

- In sperm cells, coenzyme Q10 (CoQ10) is concentrated in the mitochondria
- Coenzyme Q10 is responsible for energy for movement and all other energy-dependent processes in the sperm cell.
- Reduction in levels of CoQ10 is observed in sperm cells and seminal plasma of idiopathic (IDA) and varicocele-associated (VARA) asthenozoospermic patients
- Sperm cells, characterized by low motility and abnormal morphology, have low levels of CoQ10

Exogenous CoQ(10) improves sperm parameters



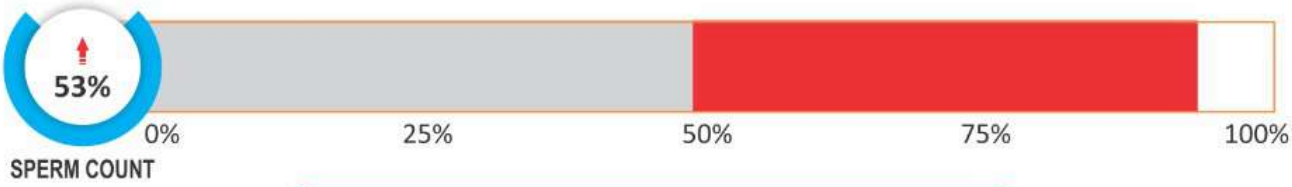
Research has proved that CoQ10 supplementation helps improve sperm motility levels. CoQ10's ability to improve motility is due to its antioxidant properties and its contribution to cell energy production.

CoQ10 Improves Sperm Motility

CoQ10 increases total sperm motility, number of rapidly motile sperm and decreases the number of sluggish motile sperm and non-motile sperm.

CoQ10 Improves Sperm Count

CoQ10 increases the sperm count and increases the chance that sperm will reach and fertilize the woman's egg.



CoQ10 and DNA Fragmentation

CoQ10 supplementation reduces reactive oxygen species levels and sperm DNA fragmentation levels and hence improves semen parameters.

CoQ10 and Sperm Morphology

CoQ10's antioxidant properties help to protect sperm from oxidative stress and other types of degradation that can harm sperm morphology.

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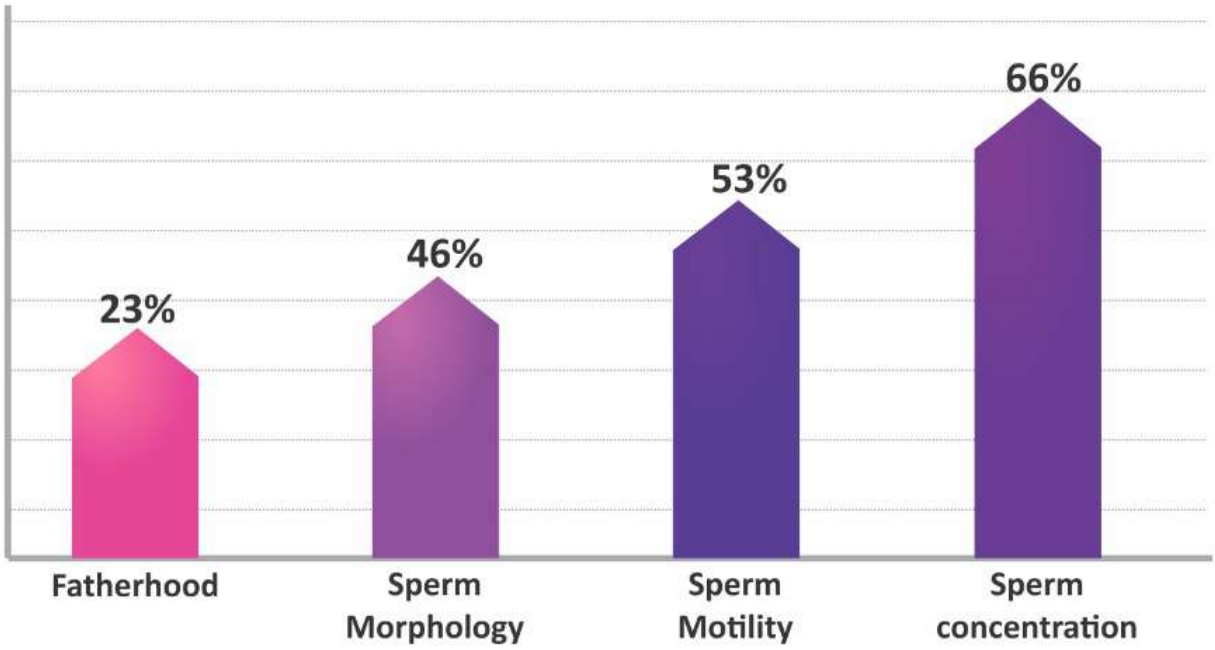
LYCOPENE[17-21]

The general mechanism by which Lycopene works is by preventing oxidative damage to sperms, which includes

- Damage to the cell membrane
- DNA molecules
- Lipids & Proteins

Lycopene improves sperm parameters



VITAMIN B12[22-25]

Increases sperm count and sperm concentration

Vit. B12 plays an important part in the development of sperm. It was found to increase total sperm count in 53.8% cases and sperm concentration in 38.4% cases.

Boosts Sperm Motility

Vit. B12 improves sperm motility. In a study, it was found that sperm motility and total motile sperm count increased by 50%.

Prevents premature ejaculation

Studies proved that low levels of Vit. B12 were associated with premature ejaculation.

Prevents loss of libido

ZINC[26-30]

- Improves sperm count, sperm motility and sperm morphology
- Plays an important role in stabilizing the cell membrane and nuclear chromatin of spermatozoa in seminal plasma
- Improves testosterone concentration
- Improves sexual potency
- Plays vital role in spermatogenesis

FOLIC ACID[31-32]

The process from germline stem cell to sperm cell takes about 60 days. Folate is an essential nutrient when it comes to cell division and DNA synthesis. Folate levels measured in semen have been associated with sperm count and health. Studies have found that low folate levels in semen is associated with poor sperm DNA stability

% increase in normal sperm count in infertile men with Folic acid + Zinc

SELENIUM[33-36]

- Deficiencies of selenium can lead to instability of the mid-piece, resulting in defective motility
- Important for reproductive functions such as testosterone metabolism and is a constituent of sperm capsule selenoprotein
- Induces a statistically significant rise in sperm motility
- Encourages antioxidant GSH-Px activity, thus decreasing ROS and leading to increased male fertility

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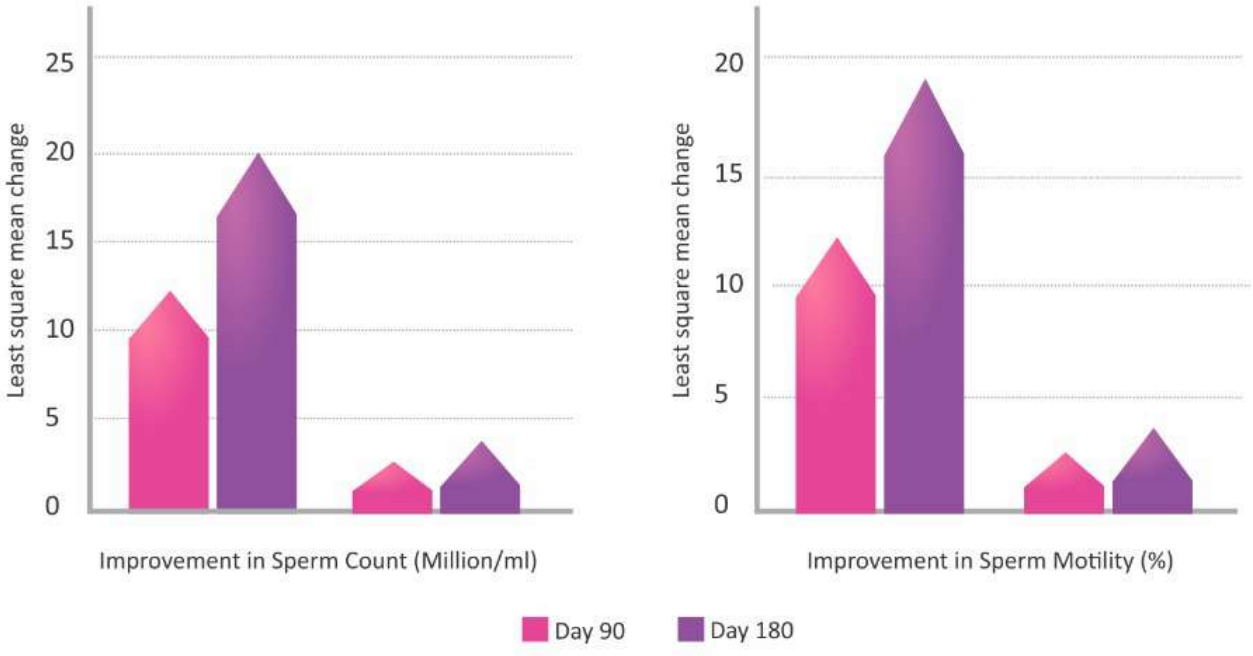
To assess the effectiveness and safety of fixed dose combination of Coenzyme-Q10, L-carnitine, Lycopene and Zinc in the treatment of idiopathic oligoasthenozoospermia[37]

- Deleterious effects of reactive oxygen species and other oxidant molecules on sperm motility and membrane integrity have been well documented.
- FDC of antioxidant improve seminal parameters and its ensuing effect on resultant pregnancy
- 100% improvement in sperm count at 180 days was observed
- Sperm motility improved during the 6 months of administration
- Three times more pregnancies were seen with antioxidant FDC treatment
- The FDC formulation appears to be largely safe, since very few mild adverse events were reported



"Exogenous administration of fixed dose combination of antioxidants is a safe and effective therapy in improving the male infertility"

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