



A COMBO FOR MEN AND WOMEN FERTILITY





REPRODUCTION IS A KEY TOPIC FOR BOTH **MEN** AND **WOMEN**

According the **World Health Organization (WHO)**, infertility is considered as a disease of the male or female reproductive system, defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse.

Almost 15% of the reproductive-aged couples worldwide are affected by fertility problems ⁽¹⁾.

Between 48 million couples and 186 million individuals have infertility globally.



concerns around one six people in the world le infertility alone



Male infertility contributes to 20-50% of infertility cases



MALE

In the **male reproductive system**, infertility can be due to several causes such as:

- Dysfunction in the ejection of the semen
- Absence or low levels of sperm
- Abnormal shape (morphology) and movement (motility) of the sperm

FEMALE

In the **female reproductive system**, infertility can be due to several causes affecting:

- Ovarian development
- Maturation of oocytes
- Fertilization competence
- Preimplantation development
- Implantation
- Fetal growth





MEN o



Selenium enriched yeast offering the best bioavailable form of selenium: Selenomethionine

Selenium is involved in male fertility and contributes to the normal spermatogenesis ⁽²⁾. Selenium may influence the **biosynthesis** and **secretion of testosterone** ⁽⁷⁾, one of the most important hormone for male fertility. Selenium may be needed to maintain testicular morphology (8).

Selenium critical role in spermatogenesis is mainly mediated by two selenoproteins ⁽³⁾:

- Glutathione Peroxidase 4 (GPx4)
- Selenopotein P

Glutathione Peroxidase 4 is thought to:

- Shield the sperm from DNA damage caused by oxidative stress in the initial phases of spermatogenesis ⁽⁴⁾
- Ensure integrity and motility to sperm by being a part of the flagellum sheath ⁽⁴⁾
- May be involved in the stabilization of condensed chromatin during sperm maturation (21)

Selenoprotein P may be considered as:

- An oxidant defense agent (5)
- An essential component of the selenium delivery pathway for developing spermatogenic cells (6)



Folate is essential in spermatogenesis. Low folate in semen is associated to:

Poor sperm DNA stability and damage + Low sperm count + Poor sperm motility and morphology





WOMEN \bigcirc



Quatrefolic®*, the innovActive folate, is the **biologically active** form of **folate** everyone can used without any enzyme conversion step.

Folate is **indispensable** for follicular and **embryonic development**.

The MTHFR gene polymorphisms (40% of the population) have been related to higher homocysteine levels. High homocysteine concentration is associated to:

- Difficulties getting pregnant
- Increased risk of miscarriage

The active form of folate, 5-MTHF, has the advantage to bypass MTHFR enzyme Supplementation with Quatrefolic[®] has the capacity to lower homocysteine levels and thus, may **increase** the chance to get **pregnant**.

Several studies highlight that couples supplemented with Quatrefolic[®] show a higher rate of **successful pregnancies**.

Lynside Forte Se+

As antioxidant, selenium may influence the later **growth** and **proliferation** of **follicles** ⁽⁹⁾. In addition, selenium may impact positively the **embryo development** and **survival** ⁽¹⁰⁾.



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Gnosis by Lesaffre - France 101 Rue de Menin 59700 Marcq-en-Baroeul, France +33 (0)3 20 81 61 00



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