

NATURA**Medicatrix**

Fertil**Hom**

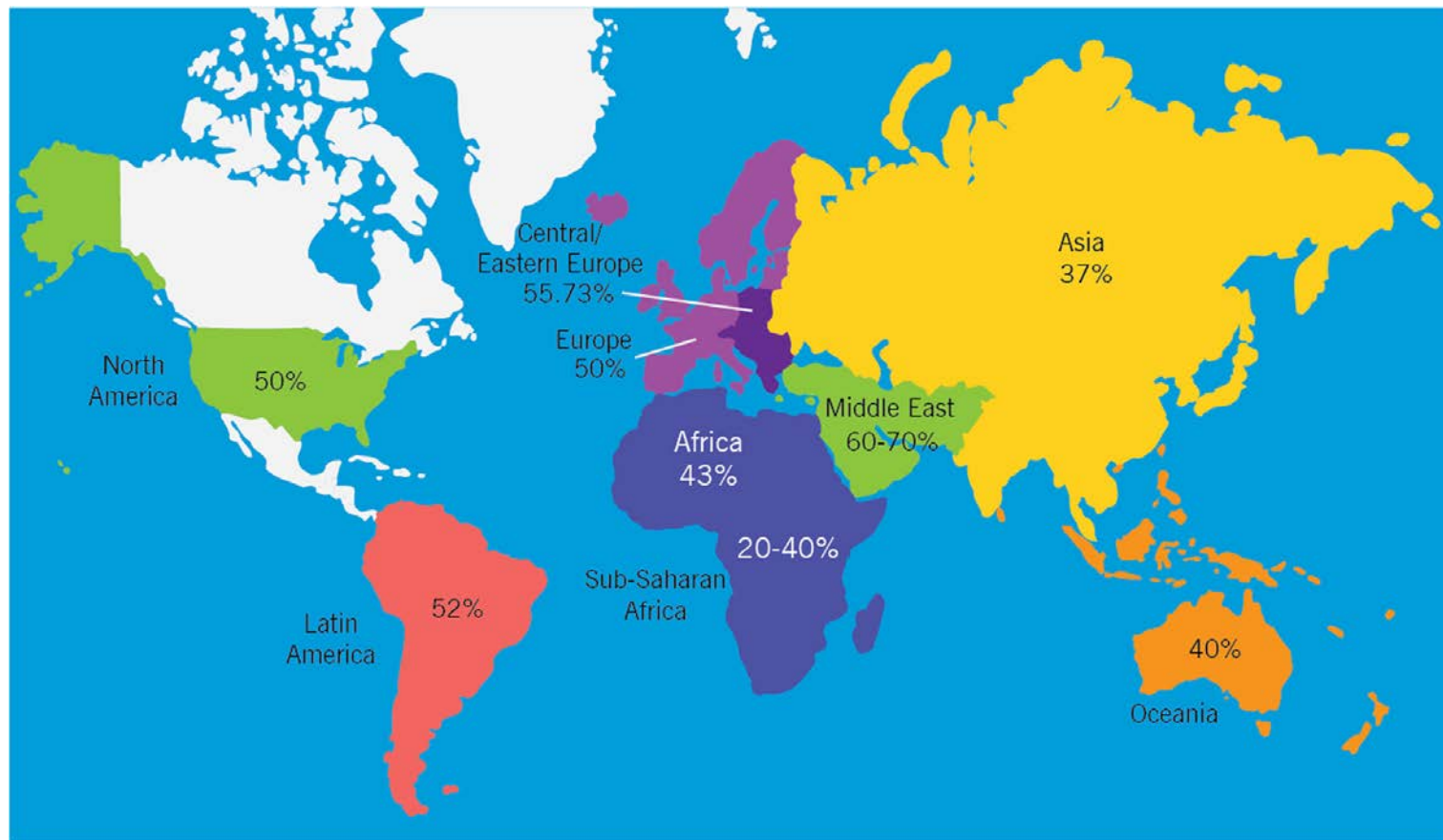
✓ **MALE FERTILITY**

✓ **NORMAL SPERMATOGENESIS**

**WITH A RANDOMIZED DOUBLE BLIND PLACEBO
CONTROLLED CLINICAL TRIAL**



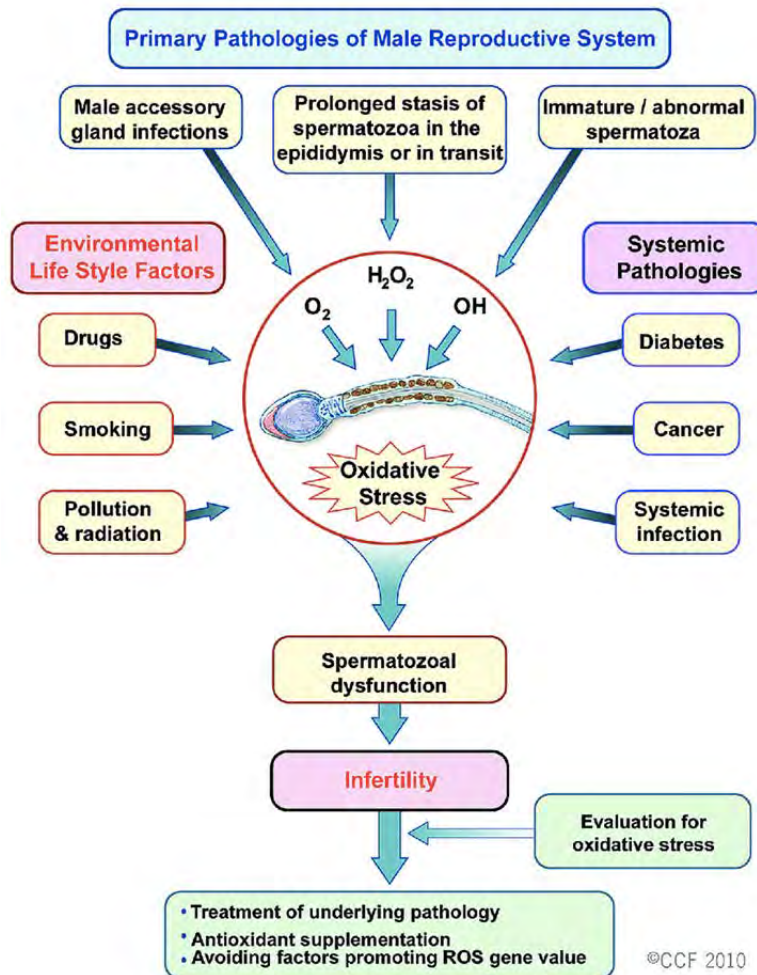
A unique view on male infertility around the globe



World map containing percentages of infertility cases per region that are due to male factor. This figure demonstrates rates of infertility cases in each region studied (North America, Latin America, Africa, Europe, Central/Eastern Europe, Middle East, Asia, and Oceania) due to male factor involvement

Causes and Risk Factors of Male Infertility

Non-genetic factors



Genetic factors

- Different chromosomal abnormalities associated with infertility
- Translocation as most common
- Genetic sperm damages
- Relation between sperm motility and DNA damage

Genetic abnormalities can be transmitted to the male progeny, who may subsequently have a more severe phenotype of infertility

50% of cases of male infertility are idiopathic *

FERTILHOM as treatment for male infertility

TREATMENT OF IDIOPATHIC OLIGOSPERMIA, ASTHENOSPERMIA, AND TERATOSPERMIA

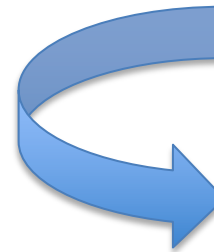
Basis = spermiogram

FERTILHOM: treatment
option for idiopathic infertility

Normal Values of Semen Variables: WHO Guidelines		
	1999	2010
Volume	2.0 mL or more	1.5 ml (1.4–1.7);
pH	7.2 to 8.0	
Sperm concentration	20 million or more	15 million per ml (12–16);
Total sperm count	: 40 million or more	39 million per ejaculate (33–46);
Motility	: 50% or more with forward progression or 25% or more with rapid progression	progressive motility, 32% (31–34); total (progressive + non-progressive) motility, 40% (38–42)
Morphology	30% or more with normal forms	4.0% (3.0–4.0).
White blood cells	Less than 1 million	
Immunobead	MAR<50% bound/adherent	

TRIPLE ACTION

LC/ALC



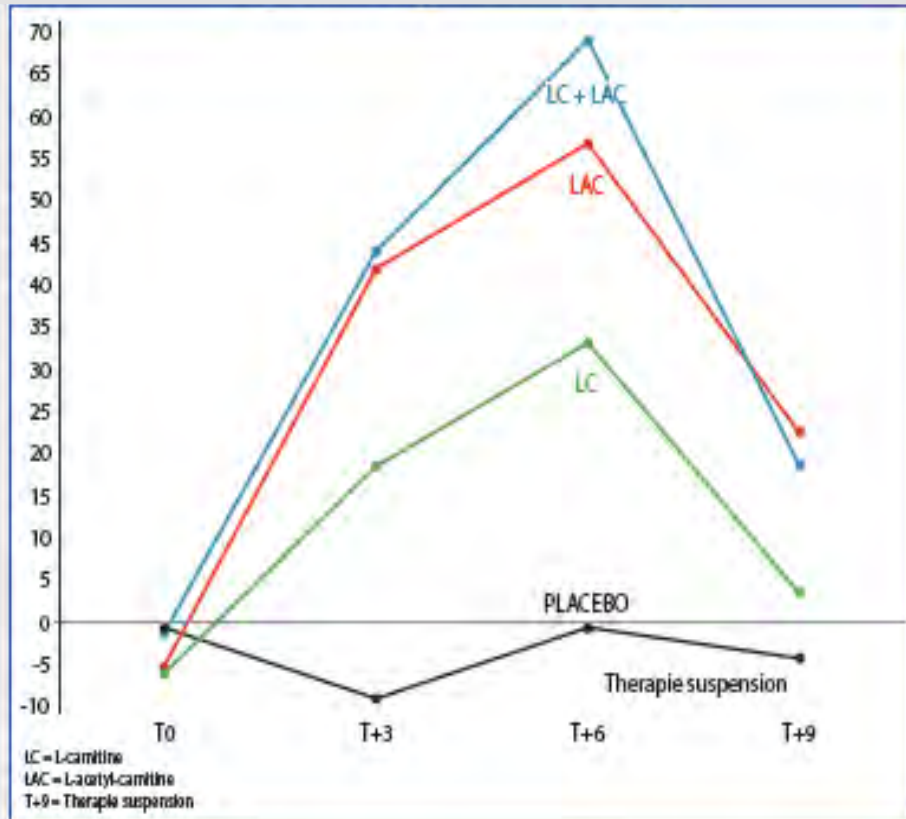
Oxydative
Stress



Synergistic
Factors

Association of **2 forms of carnitine** = **+38% pregnancy!**

FORWARD SPERM MOTILITY³⁰



L-Carnitine and acetyl-**L-carnitine** (ALC) are highly concentrated in the epididymis and play a crucial role in sperm metabolism and maturation. They are related to sperm motility and have antioxidant properties

Combined LC + LAC resulted in improved forward motility, when compared with LC and LAC therapy alone³⁰

Return to baseline values after supplementation has stopped

Cavallini study²⁹

- ✓ placebo : +1,5% pregnancies
- ✓ 1 form of carnitine : + 21,8% pregnancies
- ✓ 2 forms of carnitine : **+ 38% de pregnancies!**

Selenium: reproductive functions in Humans (EFSA)

Selenium's roles

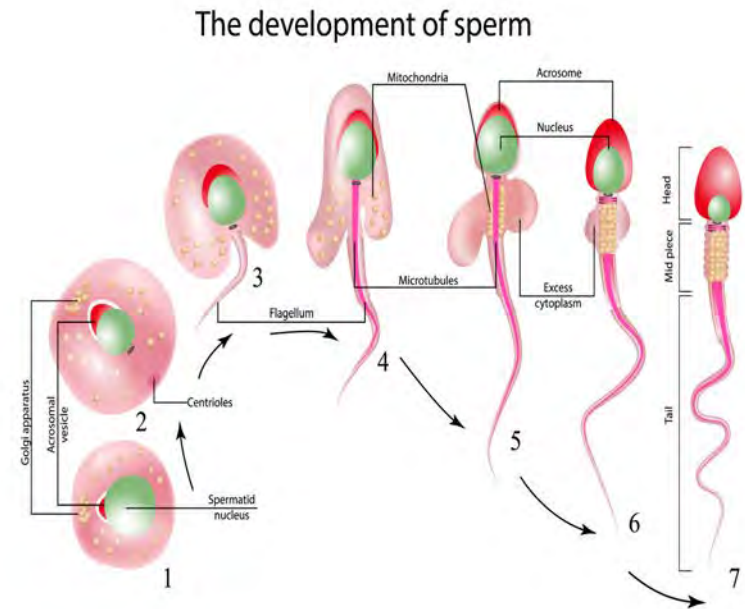
- ✓ Testosterone synthesis
- ✓ Spermatogenesis
- ✓ Antioxidant (protects stagnant sperm in the testicles)

Selenium deficiency & infertility⁹

Deterioration of sperm quality and motility

➔ Infertility and importance of supplementation (women & men).

➔ **2 cofactors : B9 and B12**

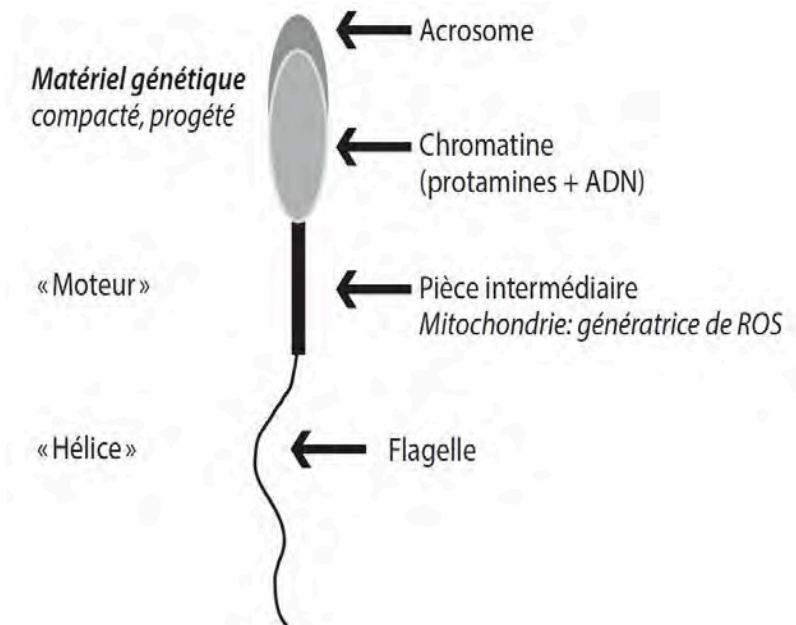


Glutathione, super antioxidant

- ✓ Glutathione peroxidase (GSH-Px) fights oxidative stress
- ✓ It detoxifies lipid peroxides in sperm¹¹

Selenium + glutathione = mobile and stable flagella

- ✓ The selenium protein GPX4 (selenium + glutathione peroxidase) plays an important structural role
- ✓ Ensures the integrity of flagella to ensure **sperm mobility and stability**¹⁰





Zinc and Selenium: reproductive functions in Humans (EFSA)

Zinc's roles

- ✓ Testicular development
- ✓ Spermatogenesis and sperm mobility
- ✓ Activity of 5- α -reductase (enzyme necessary for the conversion of testosterone to 5- α -dihydrotestosterone, a biologically active form of testosterone)

Zinc + B9 synergy

- Zinc improves B9 assimilation and metabolism^{6,7,8}
- Synergy increases normal sperm count and motility.

➔ Sperm count increased to 74%⁵



Arginine : production of quality sperm

- Decreases with age but late childbearing
- Supplementation for several months increases sperm **quality and quantity**³¹

Coenzyme Q10 : sperm quality

Dual functions

- Powerful fat-soluble antioxidant
- Intermediary of the respiratory chain

Coenzyme Q10 is essential for the production of energy for sperm cells

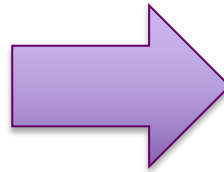
→ ↑ **sperm mobility**

Vitamin B12

Deficiency in relation to loss of mobility and reduced sperm count

Synergy importance

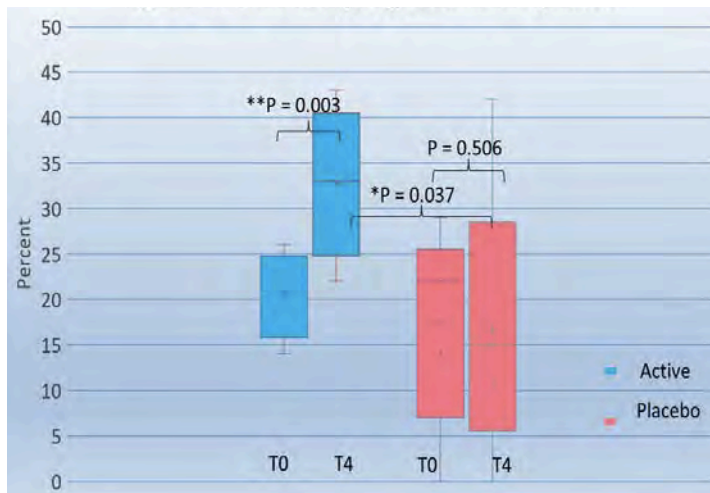
- Hypofertile patients supplemented for 3 months with carnitine alone or with a complex
 - Improvement in both groups (volume, density, mobility, morphology)
 - Best results for multi-supplement group
 - ➔ The effect of a formulation with synergy of several nutrients properly dosed is better¹⁵



Role of nutritional support (fertilhom®) In idiopathic male infertility

A clinical study Randomized in double blind against placebo

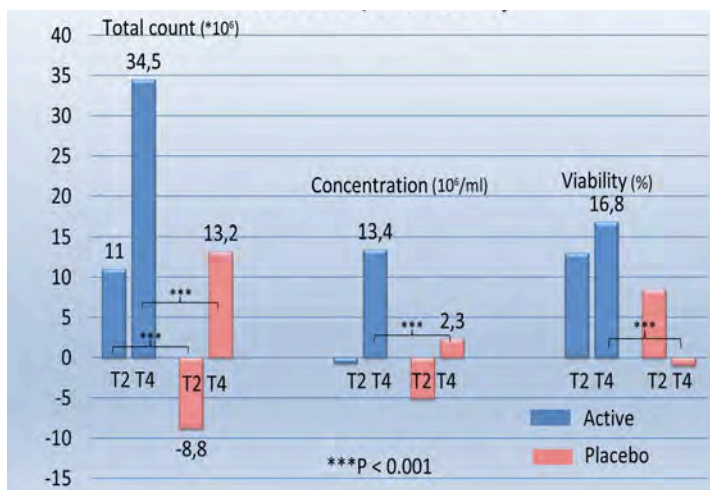
Sperm mobility



After 4 months of daily consumption

- ✓ Linear sperm mobility is twice better compared to the placebo group ($P=0,037$).
- ✓ It has returned to WHO standards for the FertilHom® group

Sperm count, concentration & viability



- ✓ Very significant improvement in total sperm count, sperm concentration and viability in the FertilHom® group compared to placebo after 4 months ($P < 0,001$).

Role of nutritional support (fertilhom®) in idiopathic male infertility

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Active group

11 Pregnancies



11 women (out of 42) became pregnant in the FertilHom® group

2 forms of carnitine

Arginin

Zinc, Selenium

B9 et B12

Q10, glutathione



20 sachets

FertiHom® improves spermogram results after 4 months of use in hypofertile patients

- ✓ Mobility ↗
- ✓ Quality ↗
- ✓ Quantity ↗

Daily intake until an active pregnancy



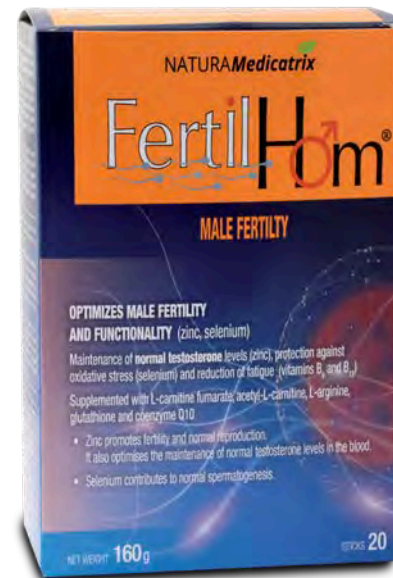
unique combination & dosage of useful nutrients

Composition	1 stick	Actions	Results
L-Carnitine fumarate	2,9 g	Energy production for sperm cells	<div>↑ mobility</div> <div>Normal morphology</div> <div>↑ volume</div>
Acetyl-L-carnitine	500 mg		
Coenzyme Q10	40 mg		
L-arginine	250 mg	Normal sperm cells Sperm quality and quantity	
Glutathione	100 mg	Protects the membrane from sperm	
Glutathione + selenium		Sperm stability (formation GPX)	
Zinc	7,5 mg	Improves fertility (EFSA claim)	
Zinc + vitamin B9	B9 = 200 µg	Improves sperm concentration	
Selenium	50µg	Normal spermatogenesis (EFSA claim)	
Vitamin B12	2µg	Increases sperm count	



1 sachet per day to be dissolved in a glass of water before breakfast or dinner during minimum 3 months.

20 sachets/box.



- ✓ FertilHom® comes to the aid of men who want to improve their fertility.
- ✓ FertilHom® offers a unique combination and dosage of useful nutrients.
- ✓ Completely natural and without side effects, FertilHom® makes it possible to increase the number of spermatozoa, their motility and quality.