# DO YOU SUFFER FROM<sup>15,16</sup>...



Helps to correct imbalances associated with POOR SPERM QUALITY AND REPRODUCTIVE HEALTH ISSUES<sup>15,16</sup>

# DO YOU SUFFER FROM MALE INFERTILITY?

Infertility is defined as the inability to achieve pregnancy within 12 months or more of regular unprotected sexual intercourse<sup>17</sup>



1 out of 6

couples are affected by infertility<sup>18</sup>

Male infertility contributes roughly

**40 %** of infertility cases<sup>16</sup>

30-80 %

of male infertility cases are caused by the damaging effects of oxidative stress<sup>16</sup>

#### OXIDATIVE STRESS

reduces the number and concentration of sperm as well as impairs the movement of sperm<sup>18</sup>

# IMPORTANT FACTORS DETERMINING MALE FERTILITY

A **semen analysis** is often one of the first tests performed to help establish if a man has infertility issues. A semen analysis measures, among other things, the **number and quality of sperm** in the semen sample.<sup>19</sup>

#### **QUANTITY**



Too little sperm in an ejaculation might make it more difficult to get pregnant.<sup>19</sup>

#### **MOVEMENT**

1000

Known as motility. A man is most likely to be fertile if at least 50% of his sperm are moving. 19

#### **STRUCTURE**

96

Known as morphology. Normal sperm have oval heads and long tails, which work together to propel them. The more sperm a man has with a normal shape and structure, the more likely he is to be fertile.<sup>19</sup>



#### WHAT CAUSES MALE INFERTILITY?

Male infertility can be due to multiple reasons including varicocele (enlargement of spermatic veins), testicular failure, hormone dysfunction, genital tract infection or exposure to toxins, but in almost a third of cases, the cause is unknown.<sup>20</sup>

Infertility of which the cause is unknown or unexplained, is called **idiopathic infertility**. **Oxidative stress (OS)** is believed to be an important cause of idiopathic male infertility. Oxidative stress is a condition where the body's natural antioxidant defence mechanisms are overwhelmed by harmful **free radicals**, also known as **reactive oxygen species (ROS).**<sup>18</sup>

**30** % - **40** % of infertile men have elevated levels of harmful reactive oxygen species (ROS) in their seminal plasma.<sup>18</sup>

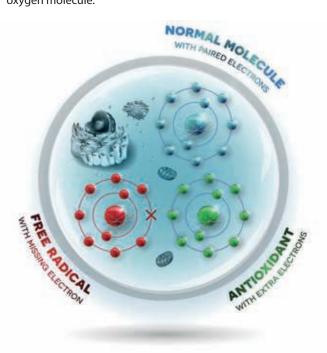


#### WHAT IS OXIDATIVE STRESS?

It is ironic that oxygen, an element that is essential for life, under certain situations has detrimental effects on the human body.<sup>21</sup>

Most of the potentially harmful effects of oxygen are due to the formation and activity of a number of chemical compounds, known as **free radicals/ROS.**<sup>21,22</sup> Free radicals are destructive because they are **like bullies** that **beat up on other cells and steal their vital electrons.**<sup>21</sup>

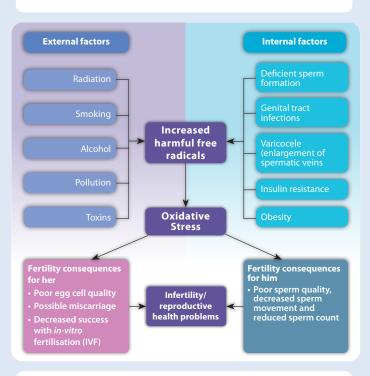
Electrons come in pairs, so free radicals try to stabilise themselves by stealing an electron from another oxygen molecule.<sup>21</sup>



Oxidative stress is an imbalance between the systemic manifestation of ROS and the body's ability to detoxify and to repair resulting damage. 18,22

#### WHAT CAUSES OXIDATIVE STRESS?

**Oxidative stress** may be caused by **internal** (within the body) or **external** (outside the body) factors, both of which may have a negative impact on male and female reproductive health. 4,16,18,23



# Antioxidant supplementation has been shown to help restore balance and improve fertility success rates.<sup>2,4,15,16</sup>

Antioxidant supplementation in males has been shown to improve sperm concentration, motility (movement) and morphology (size, shape and structure). In women, antioxidant supplementation is associated with better egg cell quality during assisted reproductive techniques such as IVF.<sup>6,24</sup>

#### WHAT IS SINOPOL® HIM?

Sinopol® him is a supplement which contains alpha-lipoic acid, myo-inositol, coenzyme Q10, zinc, selenium and vitamins B2, B6 and B12. These ingredients work together to support male reproductive health by decreasing oxidative stress, improving sperm quality, rebalancing testosterone levels and decreasing insulin resistance. 12,15,16,25



#### Alpha-lipoic acid

Alpha-lipoic acid is a powerful antioxidant which is also able to regenerate other antioxidants (Vitamin C and E). 11,26 It helps to reduce insulin resistance, body weight and abdominal circumference. 11,12,25



#### **Myo-inositol**

Myo-inositol has a possible role as antioxidant agent and supports the rebalancing of hormones. It plays a role in insulin metabolism and also helps to improve sperm movement and concentration. 16,27-29

Q10

#### Coenzyme Q10

Coenzyme Q10 is another antioxidant which helps to improve sperm concentration and sperm movement, as well as helps to improve the amount of normal looking sperm.<sup>30-33</sup>



#### WHAT IS SINOPOL® HIM?

Z

#### Zinc

As an antioxidant, zinc plays a role to support normal sperm development. It contributes to normal testosterone levels in the blood and supports reproductive function. It has also been shown to help increase sperm count and movement, as well as the amount of normal looking sperm. 15,34,35

SE

#### Selenium

Selenium supports normal sperm development and helps to protect sperm from oxidative stress. It has also been shown to help increase sperm count and movement, as well as the amount of normal looking sperm. 15,29,36



#### Vitamins B2, B6 and B12

These vitamins contribute to the protection of cells from oxidative stress and help to regulate hormonal activity. 15,16,37



#### **CLINICAL RESEARCH**

STUDIES CONDUCTED WHICH INCLUDE ALPHA LIPOIC ACID AND MYO-INOSITOL HAVE SHOWN:11,16,27

Increase in sperm count<sup>16</sup>

Increase in normal sperm morphology (size, shape and cellular properties)<sup>16</sup>

Increase in progressive sperm motility (movement)<sup>16</sup>

Increase in successful partner pregnancy rate<sup>16</sup>



# Sinopol him for him



Helps to correct imbalances associated with POOR SPERM QUALITY AND REPRODUCTIVE HEALTH ISSUES 15,16

### **Sinopol®**

### for her



Helps to correct imbalances linked to POLYCYSTIC OVARIAN SYNDROME & ASSOCIATED REPRODUCTIVE HEALTH ISSUES<sup>2,4,5,8,10,12-14</sup>

"Linked to PCOS

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Proprietary name (and dosage form): SINOPOL® Granules. Composition: Each sachet contains: Myo-inositol 1 000 mg, Alpha Lippic Acid 400 mg and Folic Acid 200 mg. Gromplementary Medicine: Health Supplement. 1934.12 Multiple Substance formulation. This unregistered medicine has not been evaluated by the SAHPRA for its quality, safety or intended use. Studies as part of the references were not conducted on Sinopol®. Proprietary name (and dosage form): SINOPOL® him Granules. Composition: Each sachet contains: Myo-inositol 500 mg, Alpha Lippic Acid 400 mg, Goenzyme (101 100 mg, Zim 7, 5m gn, Vitamin B 21, 44 mg, Vitamin B 10, 44 mg, Selenium 41,5 µg and Vitamin B12,2,5 µg. Complementary Medicine: Health Supplement. D34.12 Multiple Substance formulation. This unregistered medicine has not been evaluated by the SAHPRA for its quality, safety or intended use. Studies as part of the references were not conducted on Sinopol® him sachets; efficacy is proven on active ingredients. Name and business address of applicant: Nova Pharmaceuticals (Pty) Limited. Co. Reg. No. 1952/001640/07, 15e Riley Road, Bedfordview. Tel. No. 011 087 0000. www.inovapharmac.oza. For more information, speak to your healthcare professional. Further information is available on request from liNova Pharmaceuticals. 1510/L. IN4115/21.

