

What is Semen Analysis?

A Semen Analysis evaluates the amount and quality of a man's semen and sperm to determine male fertility. This test is sometimes called a sperm count.

Why is it done?

Male-factor infertility accounts for 30% of infertility cases and is a common problem in couples trying to conceive. A diagnosis of this can only be made by carrying out a complete Semen Analysis.

A Semen Analysis can help clarify whether a man has a reproductive problem that is causing infertility. Although the actual fertility of a semen sample cannot be completely determined until it is known to achieve fertilization, careful and thorough analysis of all the semen's parameters in a specialized laboratory can allow scientists to determine what fertility treatment options are reasonable.

How is it done?

A semen sample is usually collected by masturbation, directing the semen into a sterile container. No lubricants should be used as it might kill the sperm. It is a common misunderstanding of some male patients that they can improve their semen by 'storing it up'. In actual fact this is not true. Three days of abstinence are recommended before a Semen Analysis, to ensure the reliability of the test. Longer periods of abstinence may affect the accuracy of the results (less active sperm).

Generally, it is preferable that men produce their sample in the comfort of their own home and deliver the sample to the laboratory (ideally main lab and not to peripheral collection centers) within one hour. The sample should be kept close to body temperature.

What do we look for?

In the laboratory, scientists analyze the following parameters:

- Motility
movement of the sperm (swimming ability)
- Morphology
percentage of sperm that have a normal shape
- Count
the number of individual sperm present in one ejaculation

•Vitality
sperm's ability to live and endure

Interpreting Semen Analysis Results:

Normal Range as per WHO-

PARAMETER	NORMAL RANGE
Volume	> 1.5ml
Sperm concentration	> 15 million sperm / ml
Normal morphology (shape)	> 4%
Motility	> 32% with forward progression

Common Causes of Male Factor Infertility:

In the human it takes 64 days to produce fully functional mature sperm. Although many of the factors that can affect this process are still scientifically unknown, the following have been proven to have a negative effect upon sperm quality:

- Smoking
- Excessive alcohol intake
- Recreational drugs
- Some herbal supplements
- Prolonged exposure to chemicals, such as pesticides and heavy metal
- Illness, such as particular fevers
- Excessive exposure to heat, such as sitting with the laptop on the lap and being in the sun for long periods

Treatment Options:

Dr. Agarwal will advise you of the many treatment options available if needed such as Intrauterine insemination (IUI), Intracytoplasmic sperm injection (ICSI), Sperm aspiration (PESA, TESA), In vitro fertilization (IVF).

