

# Semen analysis and sperm motility

Last Updated Tuesday, 01 November 2005

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The determination of the number of sperm that are moving rapidly in a forward progressive manner is of paramount importance in the evaluation of male fertility.

In an average semen analysis, there will be some sperm with no movement, some that are moving slowly and/or some that do not move in a forward direction. These sperm are less likely to be able to produce a pregnancy easily.

With computerized semen analysis, the computer identifies and tracks every sperm seen in under the microscopic field. Over a fraction of a second, the path the sperm has traveled is analyzed and many different parameters can then be computed with a high degree of accuracy.

In the picture below, the squiggly green lines are the paths of individual sperm. The red dots mark sperm that are not moving.

Some of the parameters that are calculated include:

- Overall motility-Percent of sperm showing any movement
- Rapid motility-Percent of sperm traveling at a speed of 25  $\mu\text{m}/\text{sec}$  or faster
- Linearity-Percent of sperm moving in a straight line path
- Progressive motility-Percent of sperm moving rapidly AND in a straight path
- Mean velocities-An average speed for all sperm in the field of view
- Amplitude of lateral head displacement-The average distance that the sperm head "wiggles" back and forth while moving

A computerized semen analysis will give many more parameters that are useful to the fertility specialist. Learn about the measurements of sperm motility.

Here is what a sample report looks like: male infertility test, male infertility tests, male fertility, male infertility, male fertility test, sperm, sperm counts, low sperm counts, increase sperm counts, normal sperm count, sperm concentration, sperm motility, sperm morphology, semen analysis

Medical studies have evaluated these parameters individually and have found that many are independent predictors for male fertility. In other words, it is now possible to identify men with fertility problems even though their standard semen analysis may seem completely normal.