

Sperm Analysis and Interpretation

Sperm count	The <u>number</u> of sperm per millilitre. Should be over 20 million per ml in a sample. If a woman is fertile it is still possible for her to conceive with a man whose sperm count is right at the bottom end of normal (20 million), as long as the sperm are healthy.
Sperm motility	The percentage of sperm <u>moving</u> . Should be more than 50 percent in a sample. It makes no difference if a man has a high sperm count if the sperm can't swim to reach the eggs.
Sperm morphology	The percentage of abnormally shaped sperm, More than 15 percent of sperm in a sample should be normally shaped (oval head, normal mid-piece and long tail). If the sperm are not normal, fertilisation may be prevented or a miscarriage may occur. Many morphology issues are related to lifestyle factors.
Seminal volume	The amount of ejaculate in a sample. Too low and this can interfere with the transportation of sperm and they may not reach the cervix. Too high and this can dilute the density of the sperm and affect their motion. Should be between 2ml and 5ml in a sample.
pH	Should be alkaline because the alkalinity protects the sperm from the acidity of the vaginal fluid. If the pH is too acidic there could be a problem with the function of the seminal vesicle. Should be between 7.2 and 8.
White blood cells	If these are too high it could indicate an infection. Should be fewer than 1 million per ml in a sample.
Round cells	If these are too high it could indicate an infection. Should be fewer than 5 million per ml in a sample.
Agglutination	Sperm clumping could prevent forward movement and stop the sperm swimming up through the cervix. Could indicate an immunological problem and that the man's body is producing antibodies to his own sperm. There should not be any agglutination in a sample.
Anti-sperm antibodies	Anti-sperm antibodies can cause agglutination or even prevent fertilisation because they stop the sperm being able to penetrate through the cervical mucus. If less than 50 percent in a sample this may not affect fertility.

Debris	If significant debris this can indicate an infection or inflammation of the prostate. Minor amounts of debris is common and normal. The man will be asked to ejaculate more frequently to see if this clears the debris and repeat the test. If not, checks on the prostate may be advised. Graded 0-4, 0-1 being normal.
Liquefaction	Sample should be liquid within 60 minutes which allows the sperm to swim efficiently. If liquefaction is incomplete in this time frame, it may hinder sperm motility.
Viscosity	If the viscosity is high then this may stop the sperm from moving efficiently. It could also indicate a problem with the prostate. The 'thickness' of the sample should just say 'normal'.