



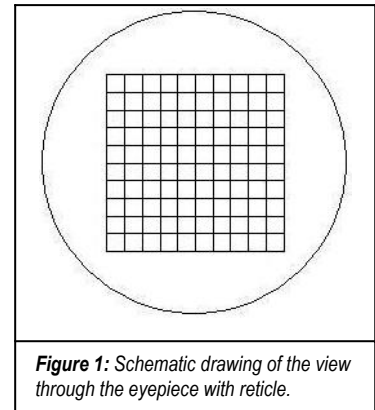
Determining the sperm concentration hand counting

Determination of the exact and correct sperm concentration is not difficult. All you have to do is count!

Please keep the following in mind: this is a very simplified directive, in the original manual on how to determine semen concentrations using Leja® slides more information can be found on the Segre-Silberberg effect, on how to calibrate your microscope.

It is important to carefully count two things:

- **S** = total amount of sperm cells (we recommend about 200 per chamber, in 2 chambers)
- **B** = total amount of boxes counted (see figure 1, here you see through a reticle with 100 boxes)



Now you can calculate **N**:
$$N = \frac{S}{B}$$

The sperm concentration:

Calculation of the sperm concentration follows this formula: $C = N \cdot F$

- **C** = Sperm concentration
- **N** = average number of sperm per box
- **F** = Volume correction factor (see microscope calibration, on average F=20 when using a 20X objective)