

## QwikCheck™ Semen Test Strips vs. Combur Urine Test Strips

### Background:

For testing pH and WBC in semen, Medical Electronic Systems ([www.mes-global.com](http://www.mes-global.com)) provides FDA cleared QwikCheck™ Test Strips which are specifically labeled for semen sample testing. Customers have requested a comparison of the QwikCheck™ Test Strips to urine Test Strips.

### Comparison Study:



QwikCheck™  
 Test Strips for  
 Semen

Combur Urine  
 Test Strips

Five semen samples spiked with esterase (to mimic WBC abnormal levels) were used to test the FDA cleared pH and WBC semen QwikCheck™ Test Strips (left side of picture above) and Combur Urine Test (right side). The resulting reagent reaction is displayed above. Note that the WBC color of the QwikCheck™ Test Strips is darker than in the Combur Test showing a higher sensitivity to the detection of WBC's in semen. Therefore, the color chart is different for WBC testing using semen strips vs. urine strips. Additionally a positive result for semen test strips is >1M/ml, a value which does not exist in Urine testing strips. False positive results may occur when using urine test strips (for semen samples with WBC  $\geq$  .5M/ml and  $\leq$  1M/ml (as the upper range for Urine test strips is .5M/ml).

### Recommendations:

- MES recommends using the QwikCheck™ Test Strips to accurately assess WBC's in semen samples.
- When the color of QwikCheck™ Test Strips exceeds the darkest color of the chart, select WBC  $\geq$  1M/ml in the patient/data entry screen of the SQA-V or SQA-Vision.
- Any other color shade or intensity on the QwikCheck™ Test Strips is indicative of WBC < 1M/ml.