

Hypo-Osmotic Swelling Testing

HOS-test is used to test the integrity of the sperm cell membrane using the principle of osmotic differences. When normal sperm are placed in a hypo-osmotic solution, water moves across the cell membrane into the sperm cell causing it to swell. If the membrane is damaged, then this transport of water will not occur and no swelling will take place. Thus, the percentage of swollen spermatozoa is the measure of intact membranes and hence sperm viability and fecundity (8,9).

