

Lab 3 measurement of the osmosis; we tied the end of two dialysis bags and then filled each bag one with 50% sucrose solution and the other with 25% sucrose solution. We then inserted both bags in two separate beakers of distilled water making sure the dialysis bags are fully submerged but not touching the bottom of the beakers, we allowed five minutes for the systems to equilibrate. We have been recording the fluid levels of the glass tubes in millimeters every 10 minutes for 50 minutes. The dialysis bag filled with 25% sucrose weighting 23.42g rose to the top at five minutes, and the other bag filled with 50% sucrose weighting 47.26g rose at 45 minutes. 25% sucrose has the fastest osmosis rate; we believe it rose quicker because it weighs less.

Lab 4 measurement of differential permeability of sugar and starch

We filled a dialysis bag with one 1% starch -10% glucose solution. We tied the bag to a glass rod and suspended it in a beaker of distilled water after. After 15 minutes we check the water again for starch and sugar and how we checked for starch is we added 10 drops of Lugol's solution to 5ml of water obtained from the beaker and the result was: no starch/ sugar was present. The change of color depended in dialysis bag and it resulted in a blue color which proved no sugar. After sitting in distilled water for 60 minutes determined that sugar was moderately present in it and turned into a yellow color. As regards the permeability, the change of color depended on the dialysis bag, and it resulted in a blue color which proved to have no sugar. After sitting in distilled water for 60 minutes, it was determined that sugar was moderately present in it and turned into a yellow color. As regards the permeability of the dialysis bag we can determine that sugar was present and mixed in with distilled water.

Lab 5 The effect of tonicity on red blood cells, for this lab our professor set up for us. A wet mount slide will be made of each solution we will examine each slide under high dry lens of a compound microscope. We then observe the following: Hemolysis of a cell in hypotonic solution, maintenance of cell size in the isotonic solution, Crenation of cells in the hypertonic solution. We then made a drawing of each observation and explained each slide. We can understand the difference between passive and active transport, being able to define diffusion osmosis active transport dialysis and Filtration.