The most used method to reduce the water activity is the osmotic dehydration, which consists in removing water from the fruit by immersion in a solution of a hyper concentrated solution, which adds to the product value and prevents the growth of microorganisms. In view of these observations the present study was to evaluate the effect of osmotic dehydration of kiwifruit over time. The fruits were cut into 2x1cm rectangles. In triplicate, with each box was placed a solution of 44 Brix and 58 ° for 15, 30, 60 and 120 minutes. To control the mass gain was measured in Brix fruit and the solution as well as the mass of the kiwi. In the two solutions used there was loss of mass and increased fruit soluble solids. These findings were accompanied by the decrease in osmotic solution of Brix, and the gain of soluble solids in the solution 58 ° Brix was highest value. As expected, more concentrated solutions tend to absorb more solid and more water lost to the environment, causing the speed of dehydration is greater at the beginning of the process and tend to stabilize.