Consumption of the strawberry is not only a healthy choice but also enjoyable for most of the people. It is one of the most popular and well-known fruits around the world. It is used to produce pastry products and jam. However, its utilization as vinegar is not a common application. The purpose of this study was to determine chemical properties of strawberry vinegar including antioxidant capacity. For this purpose, total acidity, pH, dry matter content and antioxidant capacity tests such as TEAC, ORAC and total phenolic contents, phenolic compounds and organic acid content analyses were carried out. The pH, total acidity and dry matter contents for strawberry vinegar were 3.57±0.0, 4.59±0.1 and 2.06±0.11, respectively. The TEAC and ORAC values for the vinegar were 6.26 mM TE/g sample, 1.67µmol/ml, respectively. The results of the study indicated that antioxidant properties of strawberry decreased during vinegar fermentation. Also, strawberry vinegar has a ?mild? antioxidant activity level when compared with other types of vinegar.