The objective of this work was to determine the antioxidant capacity and the total polyphenols content in plums (yellow and red varieties). The determination was made for the peel and fresh pulp. The effect of osmotic dehydration (OD) (65 ° Brix) on the antioxidant capacity and the total polyphenols content was studied. The total phenolic content in plums was determined according to the Folin-Ciocalteu assay, and the ferric-reducing ability (FRAP) assay was used to estimate the total antioxidant capacity. The content of polyphenols found in the peel and pulp of the red variety was 3.91 and 6.69 mg gallic acid equivalent (GAE)/100 g dry sample, while for yellow variety was 2.29 and 3.48 mg GAE/100 g dry sample. A significant decrease of 21% in the total polyphenols content was observed with the OD (p <0.05), whereas for the yellow variety a significant increase of 18% in the total polyphenols content with OD was observed (p <0.05). The antioxidant capacities for the red variety were 3,055 (peel) and 9,423 (fresh pulp) µmol Fe$^{3+}$/L, while for yellow variety were 4,154 (peel) and 2,238 (fresh pulp) µmol Fe$^{3+}$/L. A significant decrease of 69% in the antioxidant capacity with OD (p <0.05) was observed for the red variety, whereas for the yellow variety an increase of 27% in the antioxidant capacity was obtained (p <0.05). A high positive correlation was observed between the total polyphenols content and antioxidant capacity ($r^2 = 0.96$). The red variety had higher phenolic content and antioxidant capacity.