The berberry fruits is claimed also to have anti-viral activities, and as a treatment for chronic candidiasis, indigestion and parasites. The present study was conducted to evaluate the antioxidative activity, nutritional and antinutritional composition of Berberis vulgaris fruit. The antioxidant activity was determined by using thiobarbituric acid (TBA method). Absolute ethanol, absolute methanol and aqueous solution (distilled water) were used as a solvent in this study. Result shows significantly differences (P< 0.05). The antioxidant activity of ethanol extract was the highest (27.26 ±1.07 %), followed by BHT (20.29 ±177;0.23 %), methanol extract (16.80 ±177;0.23 %), Vitamin E (6.68 ±177;0.25 %) and the lowest was the aqueous extract (6.53 ±177;0.29 %). Besides antioxidant activity, Berberis vulgaris also contains nutritional and antinutritional composition namely vitamin C, malic acid and Tannin. Vitamin C and malic acid also shows antioxidative properties. The amount of nutritional and antinutritional detected in 100g of berberry were 11102.81μg of Vitamin C, 116.03μg of Malic acid and 20.51μg of Tannin.