Antioxidant activity of Five Fruit Plant Species Mentioned in the Holy Qura’n and Ahadith

A. Mirzaei*, M. Ghavamizadeh

Abstract:

Aims: Fruits are one of the oldest varieties of food recognized for human being. In accord with to Qur’an, the fruits including grape, date, fig, olive and pomegranate are gifts and heavenly fruits of creator of the universe. The Holy Quran is one of the reference books describing the significance of plants used for different diseases in Surahs.

Methods: The research work was conducted by complete and detailed information about five fruit important plant species mentioned in the Holy Qur’an and Ahadith. Plants species were arranged in systematic order of botanical names which followed by English, Quranic, local and family names. The antioxidant activity of five Hydroethanolic extract of Fruit Plant Species from Iran were analysed by three different methods (1, 1-diphenyl-2-picrylhydrazyl (DPPH) radical, 2, 2, azinobis-(3-ethylbenzthiazoline -6-sulphonic acid (ABTS) radical cation, Ferric-reducing antioxidant power assay (FRAP). In addition, for determination of antioxidant components, total phenolic content was also analyzed.

Results: The total phenolic content of fruits ranges from 36 to 149 mg Gallic acid/100g extract as measured by the Folin–Ciocalteau method. IC50 in DPPH varied from 0.3 to 3.83 mg/ml. FRAP ranged from 0.73 to 10.58 mmol of Fe (II)/ 100 g extract. The range of total antioxidant activity by TEAC method was 0.91 to 12.4 µmol trolox/g. Pattern of Antioxidant activity in fruits including pomegranate > olive > grape > date > fig.

Conclusion: Herbal medicines are being widely used in the world because of good cultural accept potential, smallest amount of damaging and less side effects.

Keywords: The Holy Qura’n, DPPH, FRAP, TEAC.

*CORRESPONDING AUTHOR: MIRZAAE2A2003@YAHOO.COM