



Evaluation of the effect of mouthwash containing black mulberry (*Morus nigra* L.) fruit juice for treatment of gingivitis

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Background and objectives: Black mulberry (*Morus nigra* L.) is well-known for its nutritional and medicinal values. Traditionally, the fruits have been used for treatment of mouth and throat inflammations. The aim of this study was evaluation of the effect of black mulberry fruit juice for treatment of gingivitis. **Methods:** The study was a randomized double blind clinical trial on 60 patients with acute gingivitis. The selected people were non-smokers and without any systemic diseases. The patients were divided into 3 groups; group 1: black mulberry juice (BMJ) 1% mouthwash, group 2: chlorhexidine 0.2% mouthwash and group 3: normal saline (NS) mouthwash. All patients were instructed to use 10 mL of the mouthwash twice daily (morning and evening) after brushing and flossing. Plaque and gingival indices in the first visit and then at 1 and 2 months after the beginning of treatment were evaluated and analyzed. **Results:** BMJ mouthwash caused a significant decrease in plaque and gingival indices compared to NS group. There was no significant difference between BMJ and chlorhexidine groups. The total anthocyanin content of the juice was 284.76±8.33 mg cyanidin3-glucoside equivalents per 100 g dried juice. **Conclusion:** The fruit juice of *M. nigra* can be considered for treatment of oral inflammatory diseases.

Keywords: fruit, gingivitis, *Morus nigra*, mouthwash