

## **Pilot study of mouthwash Yume water**

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### **Introduction**

The purpose of this experiment is to investigate the possibility of including mouthwash Yume water in the daily personal oral hygiene care of clinically healthy and none healthy patients.

### **Materials and methods**

The experiment was done with 50 patients (37 women and 13 men in the age of 25-80), which were separated into 4 groups: without oral diseases (12 patients), with Gingivitis diseases (13 patients), with Periodontitis diseases (15 patients) and patients with Oral Mucosa diseases (10 patients). After a clinical examination, the patients were subjected to professional oral hygiene procedures (removal of tartar, dental plaque and deposits with subsequent machine polishing of the dentition with abrasive and polishing brush). Two to three days after that, the patients were asked to follow their usual hygiene regimen while they were instructed: to spray water into mouth 5 times, before and after brushing of teeth, twice a day (morning and evening); not to shake the bottle or place it near heat sources, but to store it at room temperature and keep it closed.

The methodology consisted of saliva examination of patients with oral diseases before and after treatment, questionnaire survey of patients and investigators after treatment and the following methods: OHI<sub>s</sub> (Greene and Vermillion), Fedorov-Volodkin's method and PMA (index of Schour and Massler in a modification of Parma), while several indices were recorded for plaque covering and inflammation locations. Every patient was measured before and after treatment on their palm tissue and their saliva with APS (Aquaphotomics sensor). The device has a measuring range of 660, 680, 700, 720, 735, 750, 770, 780, 810, 830, 850, 870, 890, 910, 940 and 970 nm of wavelengths and the spectra of each patient was acquired 3 times consecutively.

### **Results and discussion**

The clinical investigation of Yume water shows that it has very good quality and very low bacterial content of *E. coli*, *Enterococcus faecalis* and *Staphylococcus aureus*. The water has no side effects on patients but interruption have been reported of the diseases Early herpes, Pharyngitis, Laryngitis, Conjunctivitis, Dermatitis, Cheilitis, Stomatitis and others. All patients after 4 weeks have dental plaque inhibition, reduced subjective complaints and discomforts, reduced acute Gingivitis, reduced gum bleeding, recovery of oral mucosal integrity in the area of the oral lesions with rapid healing. Also were recorded no exacerbation of underlying disease at 3 patients with Psoriasis, 2 patients with Vitiligo, 2 patients with Urticaria and 11 patients with allergy. At 25 patients with fungal infections, 7 among them had no presence of a *Candida* infection.

### **Conclusion**

In conclusion, the use of Yume water has beneficial effects on the oral cavity of healthy and not healthy patients.

### **Reference**

R. Tsenkova, *JNIRS*, pp. 303-314, "Aquaphotomics: Dynamic Spectroscopy of Aqueous and Biological Systems Describes Peculiarities of Water" (2009)