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**SELECTION OF THE ACTIVE PHARMACEUTICAL INGREDIENT  
FOR CREATING A DENTAL GEL**

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Periodontal diseases are found in 80% of children and 90% of the adult population. These diseases can not be only bringing physical and psychological discomfort, but also are causes some serious digestive problems, as well as a constant source of viral, bacterial or fungal infections.

Mouth, teeth and gums are isolated accessible areas, however, continuous wetting their saliva causes rapid washout of drugs. Therefore, special attention is paid to the development of dosage forms that would provide local, prolonged therapeutic effect. One such dosage forms are gels.

Herbal remedies and preparations containing in their composition vegetable ingredients, has long been successfully used in dentistry. Despite this, interest in drugs based on medicinal plants increases with each passing year. This trend is revival of interest in medicinal plants due to the following disadvantages of synthetic drugs: toxicity, side effects and allergies. According to WHO, allergic phenomena, arising from the use of synthetic drugs, occur in 12-18% of the population.

Due to the side effects and the resistance that pathogenic microorganisms build against the common antibiotics, much recent attention has been paid to extracts and biologically active compounds isolated from plants used in herbal medicine.

Aloe vera is one such product exhibiting multiple benefits and has gained considerable importance in clinical research. Dental uses of Aloe vera are multiple. It is extremely helpful in the treatment of gum diseases like gingivitis, periodontitis. It reduces bleeding, inflammation and swelling of the gums. It is a powerful antiseptic in pockets where normal cleaning is difficult, and its antifungal properties help greatly in the problem of stomatitis, aphthous ulcers, cracked and split corners of the mouth. It is a powerful healing promoter and can be used following extractions. It has been used in root canal treatment as a sedative dressing and file lubrication during biomechanical preparation.

Drugs from Oak bark also are perspective for the treatment of dental diseases. Oak bark is widely used in medical practice in Ukraine and in foreign countries, but mostly used in medicine galene drugs of oak bark (decoctions, infusions) extemporal production. At the Department of Drug technology of National University of Pharmacy dense extract of oak bark are developed and put into production. Anti-inflammatory, antimicrobial, hemostatic properties are represented from it pharmacological activity. According this pharmacotherapeutic activity dence extract of oak bark with a complex of plant polyphenols, tannins and flobafen should be also add into composition of stomatological gel.

The combination of dense extract of oak bark with Aloe Vera in developed dental gel are provides comprehensive complex therapeutic effect (antimicrobial, anti-inflammatory, reparative, haemostatic).