

## FACULTY OF DENTISTRY UNIVERSITY "GOCE DELCEV" - STIP FACULTY OF MEDICAL SCIENCES DENTAL MEDICINE

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## Use of Gypsum Into Working Everyday in Dental Technician

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Introduction: Gypsum is a mineral consisting of compounds of the crystal structure. Composition is calcium sulfate dihydrate (CaSO4 2H2O). In dental laboratory the cast is of great importance and it is used for each prosthetic manufacture, or most exploited material in dental laboratory. White the overflow gypsum obtained a copy of the negative (imprint), on which the spill gets positive or model in the same subject, which according to the size and shape of fully reproduce the original, we get a clear and precise situation of the teeth and around structures.

Purpose: The purpose of this study is exploring the kinds of gypsum in chemical composition, alabaster gypsum, blue or hard gypsum, yellow or super hard gypsum and their proper use in spills manufacture to obtain anatomical studio and working model.

Materials and Methods: For the realization, we made research in PubMed from 1940 to till today. In dentistry are used white gypsum, hard and super hard gypsum. With the overflow of the negative in alabaster gypsum, we received studio models and anatomical models. White gypsum are also used for fixing models in articulator. Hard and super hard gypsum are used for models which is needed to serve for the preparation of dental construction with great precision. Super hard gypsum is used for working models and mobile dental nogs. The working model presents field - ( exactly and precisely all parameters of prosthetic), (teeth, alveolar ridges), occlusion-articulation relations between the jaws and teeth. The main features that should have been cast are: easy to mix, no porosity in model, the expansion of the gypsum binding is accompanied by a heat release.







Plaster Powder

Stone Powder

Diestone Powder

Results: Right and wrong manufacture of prosthetic devices n the manipulation of the gypsum. Alabaster gypsum was used for the outpouring of anatomical prints and obtaining anatomical and working patterns, to the articulator models and others. Hard gypsum was used for the outpouring of prints to obtain work and all kinds of precise models. Super hard gypsum was used for the outpouring of prints and acquiring operational models, for dental construction and others.

Conclusion: Obtained data from a lengthy application and work with different types of gypsum, of which we could concluded that manipulation with the gypsum should be according to rules prescribed by the manufacturer.

gypsum, prints, model, prosthetic devices, preparation dental construction. Key words: