

PATIENT INFORMATION

ABOUT *Doc's Best*™ COPPER CEMENTS TO PREVENT RECURRENT DECAY

INTRODUCTION

Although dentistry has made great strides in the last century, it is all too apparent that the high rate of recurrent decay is unacceptable and may actually be on the rise.

A review of research and literature by Ralph Steinman, DDS, Loma Linda University, describes teeth physiology and the genesis of tooth decay.

The occurrence of decay is **not** due primarily to external contamination of the tooth through acid producing foods and bacteria; but rather, through an upset of normal tooth metabolism.

Dr. Steinman identified the early loss of magnesium, copper, iron and manganese - all of which are active in cellular oxidation and necessary for the metabolism of the odontoblasts (cells of the dental pulp) - as part of the decay process.

Major problems occur when endocrine function, poor diet or stress negatively affect the fine tuned balance of trace elements. Circulatory problems, associated with ill-health or aging are additional factors increasing life-style related deficiency.

RELATIONSHIP OF ORAL HEALTH TO SYSTEMIC INFECTION

The relationship of oral health to heart disease, stroke, diabetes and pre-term, low birth weight babies has been substantiated with solid research. Links to pneumonia and respiratory disease are also indicated. Good **oral health is essential** for good overall health.

BIOFILMS AND THEIR ROLE IN DENTAL DISEASE

Around the year 2000, new scientific methods changed dental microbiology theories. Recent studies have identified more than 400 bacteria in the oral cavity; some of them produce a mucopolysaccharide (slime) layer forming extremely organized biofilm colonies, functioning like a barrier, impermeable to antibiotics or traditional disinfectants.

Tooth, porous composite, etched ceramic and metal surfaces are perfect for biofilm attachment. Where these biofilms reside, bacteria prove resistant to almost all forms of treatment except **mechanical removal** and the use of **copper**.

PROVEN SOLUTIONS TO RECURRENT DECAY

It has been proven that recurrent decay can be greatly reduced by using cements containing **essential** trace minerals, including **biocompatible** levels of **copper**. Such a combination, while effective in destroying pathogenic microbes, also **supports** the metabolic processes within odontoblasts and the overall health of the tooth.

The anticariogenic effects of copper, silver and mercury, all of which are present in amalgam fillings, provide decay resistance. Today's preferred esthetic restorations of polymers and resins serve esthetics, but do not offer decay resistance. However, by using a **new generation** of copper cements, **decay resistance, safety and esthetics** can all be achieved.

CLINICAL APPLICATIONS

Doc's Best™ products, containing **galvanic activated copper ions**, should be considered an anti-biofilm, **therapeutic** cementation system, with multiple applications. The range of products includes four different blends, each of which has been developed for various purposes:

- A red copper formulation used to cement gold work, posts and non-visible restorations, newly reintroduced as a protective base under posterior composites and resins.
- A white copper formulation, covering the same applications as the red, but specifically designed for use with porcelain margins or in esthetic areas.
- A red pulp canal sealer designed to prevent bacterial infestation of non-vital teeth.
- A white pulp canal sealer designed specifically for single-root anterior teeth.

The cement powder is mixed with diluted phosphoric acid to the desired consistency, forming a Zinc-Oxy-Phosphate cement (ZOP), the oldest and best-proven dental material still widely used (Harvard cement 1894).

The pulp canal sealer is mixed with preferred eugenol or a non-eugenol paste as a binder for the powder.

Depending on the purpose-related thickness of the mix, **the setting can take from 5 to 15 minutes.**

Copalite® dental cavity varnish is a dentin sealer, always used before placing copper cements, in order to protect living tissues. *Copalite*®'s main ingredient is natural resin extracted from plant sap (similar to amber) and has been used worldwide since 1929. The varnish is proven to be highly biocompatible, anti-microbial, anti-viral and anti-fungal.

In order to avoid **unnecessary** nerve damage, pain and future root canals treatment, we advocate the use of *Doc's Best*™ Products.

CONCLUSION

As dental professionals, we owe it to our patients to do everything possible to reduce the presence and growth of oral biofilms, make lasting restorations, promote oral disease prevention and overall optimal health. The goal is to keep teeth alive, preserve the maximum amount of natural tooth structure and reduce the need of future invasive and expensive reentry.

For all those reasons we appreciate your understanding and cooperation for the extended chair time.

CAUTIONS: If you should feel any **discomfort while chewing or sensitivity to hot/cold during more than 2 days after treatment**, please contact us immediately for a quick and simple occlusion adjustment.

If you want to know more about *Doc's Best*™ Products, feel free to ask your dentist or visit the website: **www.copalite.com**