Benefits of Nano Hydroxyapatite Compared to Fluoride

Abstract

Objective: To compare the similar remineralization effects of nano HA versus fluoride.

Background: Fluoride has been the most recommended preventative dental product since 1945-1950 when water fluoridation began. It is effective, safe, unless swallowed in high doses, and has desensitization properties. As a competitor to fluoride, the properties of nano-HA in dentistry have been making strides.

Methods: Analyzing 10 peer-reviewed studies concerning nano-hydroxyapatite and fluoride, nine articles were used to compare the benefits of the two products. Using databases, articles were found using search terms: "nano hydroxyapatite, remineralization and fluoride".

Results: Using nanoHA in oral topical solutions shows positive trends toward tooth remineralization, influx of mineral availability and remineralization of tooth structure. **Conclusion**: Similarities to fluoride prove as beneficial, in regard to addition of nanoHA to oral hygiene products for prevention of dental caries, mineralization of early carious lesions and decreased hypersensitivity.