

Equivalency of Demineralization and Remineralization in dental defects

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Aim: Finding an effective way to increase remineralization specially when enamel or dentin is partially demineralized is very valuable, because minerals can be replaced and restored with the process of inorganic mineral like material formation. Therefore the aim of this study was to review and discuss some of the new remineralization materials, techniques and also mechanism of each substance which make them efficient.

Materials and Methods: A literature search was led using PubMed, the Cochrane Library database. Recent reviewed articles and other scientific literature addressing the following scientific question were compiled: What is an effective way to overcome on demineralization?

Results: Remineralizing agents should have some characteristics to be ideal. For example they should be able to be effective in different oral environments like acidic PH such as Bioactive glass contained materials; Also, it's important to be useful for xerostomic patients. Additionally, they should have the ability to improve remineralizing efficacy of saliva like biofilm modifiers (xylitol and triclosan). They have a wide variety of indications which can be used as caries preventive material in high risk patients, repair enamel in case of white spot lesions and prevent secondary caries after a tooth restoration. To date, The most useful available artificial therapy for remineralization is still fluoride based material.

Conclusion: Despite fluoride's efficiency, sometimes it is not efficient enough. So, developing more efficient materials for remineralization therapy is necessary.

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