



Minimally Invasive Treatments
for Healthy Teeth Using **MI Paste Family**

Introduction

Minimally invasive dentistry aims to prevent and treat diseases with painless procedures, preventing the need for more complicated treatments in the future. Patients often present with minor dental caries, white spot lesions, or hypersensitive teeth, and many of these issues can be easily managed with proper care.

Dental caries has a multifactorial etiology, including pathological bacteria in the mouth, excessive use of carbohydrates, and salivary dysfunction. An analysis of the chemistry of demineralization and remineralization indicates that a major source of mineral loss in the caries process is the demineralization of fluoride, and the leakage of a neutral species of calcium hydrogen phosphate across a porous enamel surface¹. This results in an imbalance of remineralization and demineralization, causing cavities in the mouth. Depending on stage of the progression of these lesions, clinicians can help patients to manage these issues with minimally invasive products at-home.



¹ Abou Neel, E. A., Aljabo, A., Strange, A., Ibrahim, S., Coathup, M., Young, A. M., Bozec, L., & Mudera, V. (2016). Demineralization-remineralization dynamics in teeth and bone. International journal of nanomedicine, 11, 47434763. <https://doi.org/10.2147/IJN.S107624>

The MI Paste® Family

MI Paste Family includes a range of preventive products that focus on minimally invasive dentistry, such as MI Paste®, MI Paste® Plus, MI Paste® ONE, MI Paste® ONE Kids, and MI Paste® ONE Perio.

DENTAL ADVISOR has evaluated several of the MI Paste Family of products, including MI Paste, MI Paste Plus, and MI Paste ONE Perio, in a variety of clinical indications. In the Clinical Evaluation of MI Paste Plus, 67% of DENTAL ADVISOR's consultants reported that MI Paste Plus was better than their current topical desensitizing paste and 97% would recommend MI Paste Plus to others². Additionally, multiple MI Paste products have received several DENTAL ADVISOR awards, and MI Paste Plus has been a back-to-back Top Award winner for over a decade



² DENTAL ADVISOR. (2018). MI Paste Plus. <https://www.dentaladvisor.com/evaluations/mi-paste-plus-2023-product-award/>

RECALDENT™ Technology

The MI Paste Family features RECALDENT™, a milk derivative composed of casein phosphopeptide-amorphous calcium phosphate (CPP-ACP). Its unique chemistry provides enhanced tooth remineralization and is indicated for any patients at a high caries risk; patients with xerostomia, orthodontic patients, or patients with white spot lesions.

CPP-ACP is very sticky and adheres to soft tissue, plaque, pellicle, and enamel hydroxyapatite. CPP binds the calcium and phosphate ions together and stabilizes the ACP component, delivering calcium and phosphate ions in a non-crystalline state to the patient's teeth. As a result, the tooth structure benefits from the increased saturation of saliva with these calcium phosphate ions in the biofilm and fluoride release by enhancing remineralization³. The mechanism of action is similar to that of the salivary protein statherin and the supply of bio-available calcium and phosphate can drive remineralization by Fluoride (MI Paste Plus, MI Paste ONE Kids, MI Paste ONE Perio, and MI Paste ONE), buffer acid, and reduce the plaque acid effect on tooth structure.

The MI Paste Family uses bio-available calcium and phosphate ions with fluoride (except MI Paste) to help protect and repair teeth. When fluoride is combined with RECALDENT™ (CPP-ACP), the peptide preferentially combines with and stabilizes the fluoride to create an excellent source for building fluorapatite.



+++++ (97%)

³ Reema, S. D., Lahiri, P. K., & Roy, S. S. (2014). Review of casein phosphopeptides-amorphous calcium phosphate. The Chinese journal of dental research, 17(1), 7-14

Selecting the Right MI Paste Product

MI Paste products can be used for general prevention, as well as for treating tooth sensitivity due to whitening, exposed root surfaces, and before scaling and root planing. For patients with gingivitis and other periodontal problems, MI Paste ONE Perio is the product of choice, since it contains stannous fluoride to help prevent and treat gingivitis⁴. It is a great option for patients at high risk for caries or sensitivity, ortho patients, and those with active gingivitis. Utilizing proprietary technology, MI Paste ONE Perio is stabilized and therefore, helps prevent toothpaste staining. Utilizing proprietary technology, MI Paste ONE Perio is stabilized and therefore, helps prevent toothpaste staining⁵.

“Post-op sensitivity was reduced drastically while using MI Paste ONE Perio.”

– Evaluator’s Comment

MI Paste Plus is indicated for use as a topical treatment in the following types of patients: high-caries risk, xerostomia, orthodontics, postbleaching, oncology, pediatric, and high plaque/special needs⁶. MI Paste Plus is designed to provide extra protection for teeth and neutralize acid challenges from acidogenic bacteria in plaque and other internal and external acid sources. Evaluators found MI Paste Plus great for treating white spot lesions with a great consistency to spread onto the teeth.

“I had great results in recalcifying white spots by etching them and applying MI Paste Plus.”

– Evaluator’s Comment

⁴ GC America. MI Paste Family Brochure. <https://www.gc.dental/america/sites/america.gc.dental/files/products/downloads/mipasteoneperio/brochure/mi-paste-family-brochure.pdf>

⁵ Fernando, J. R., Shen, P., Yuan, Y., Adams, G. G., Reynolds, C., & Reynolds, E. C. (2024). Remineralisation of enamel and dentine with stabilised stannous fluoride dentifrices in a randomised cross-over in situ trial. *Journal of dentistry*, 143, 104895. <https://doi.org/10.1016/j.jdent.2024.104895>

⁶ DENTAL ADVISOR. (2018). MI Paste Plus. <https://www.dentaladvisor.com/evaluations/i-paste-plus-2023-product-award/>



41 CLINICAL EVALUATORS

958 TOTAL USES

89% CLINICAL RATING

Key features:

2-in-1 application • Anti-gingivitis • Sensitivity reduction • Anti-staining technology



Evaluators' Comments

"It had the consistency and flavor of any other regular toothpaste."

"Made my teeth feel clean and smooth after using even though it did not feel abrasive at all."

"Post op sensitivity was reduced drastically while using MI Paste ONE Perio."

"I like this concept for ortho patients."

"Make a larger tube with a flip-top cap."

Consultants who would:

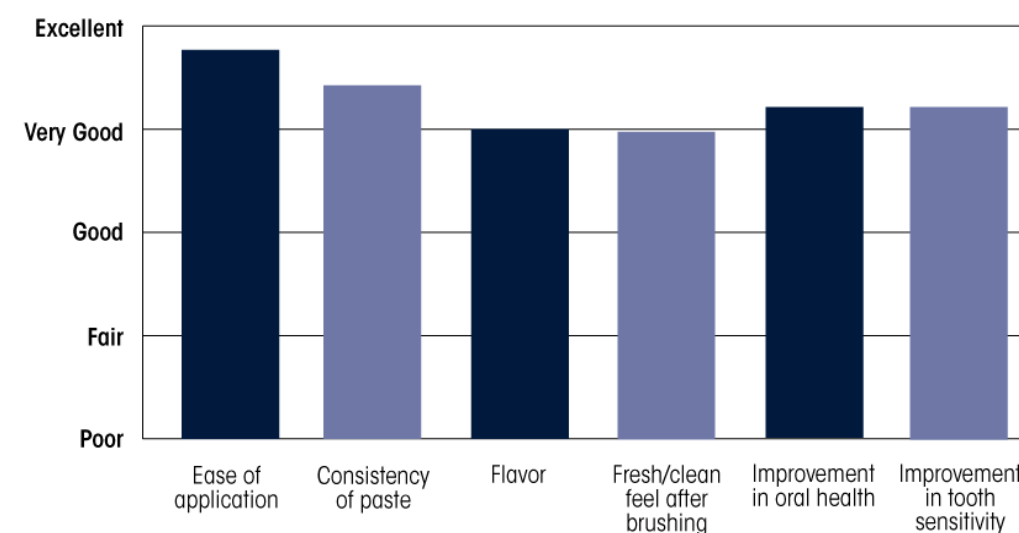
90% Recommend to a colleague

Consultants who would want to stock in office:

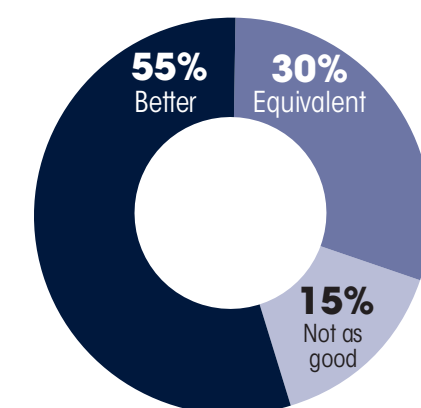
83% Yes, would purchase again

17% No, would not purchase again

Evaluation Summary:



Compared to Competitive Products:



Who can benefit and why?



Children - MI Paste ONE Kids may help children become more resistant to decay and rebuild enamel.



Pregnant or Breastfeeding Women - Regular use of MI Paste during pregnancy helps maintain elevated levels of calcium and phosphate in the saliva.



Clear Orthodontic Aligner Patients - MI Paste Plus, MI Paste ONE Perio, and MI Paste ONE can help prevent demineralization, caries, and erosion in patients wearing clear aligners for extended periods each day.



Orthodontic Patients - MI Paste Plus, MI Paste ONE Perio, and MI Paste ONE can help prevent plaque buildup and white spot development.



Athletes - The consumption of acidic energy drinks and dehydration both affect saliva quality, causing the mouth itself to become acidic. MI Paste Plus, MI Paste ONE Perio, and MI Paste ONE help neutralize the mouth's pH (guarding against caries and erosion) and help prevent demineralization.



Adults - MI Paste Plus, MI Paste ONE Perio, and MI Paste ONE help protect against hypersensitivity, caries, and white spot lesions, as well as promote remineralization and help prevent tooth erosion.



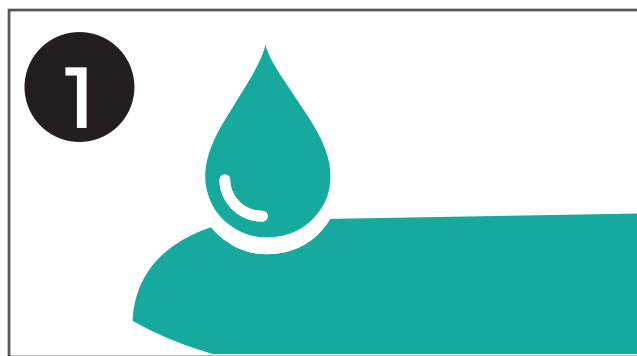
Seniors - Oral health often diminishes later in life as a result of general health conditions and the medications taken to treat those issues. Dry mouth syndrome is a common side-effect of many medications and sufferers are at a greater risk for caries; MI Paste Plus, MI Paste ONE Perio, and MI Paste ONE can help these patients fight caries and erosion.

Using the MI Paste Family

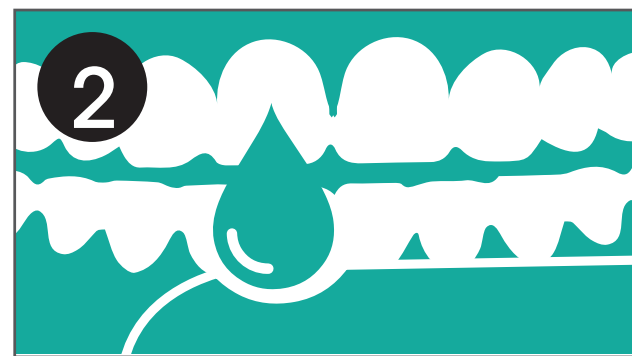
The MI Paste Family includes both toothpastes and topical tooth cremes that are easily for patients to use at home. Clinicians should stress to patients the benefits of long-term use to see great results.

MI Paste & MI Paste Plus

(After regular brushing and flossing)



Squeeze a pea-sized amount on a cotton swab or fingertip.



Apply to all teeth and use tongue to spread evenly.



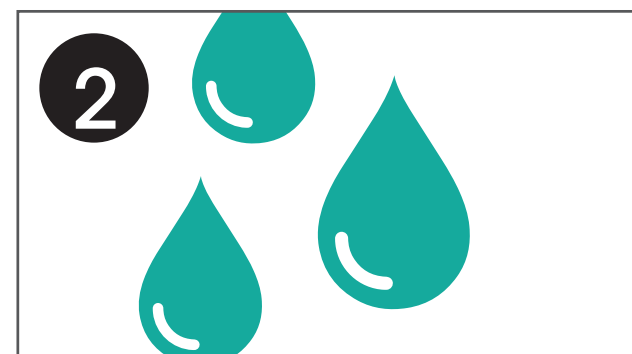
Leave undisturbed for a minimum of 3 minutes, then expectorate, but do not rinse. Let the excess slowly dissolve. Refrain from eating for 30 minutes.

MI Paste ONE, MI Paste ONE Kids, MI Paste ONE Perio

(One step technology replacing everyday toothpaste)



Brush teeth with MI Paste ONE, MI Paste ONE Kids, MI Paste ONE Perio for 2 minutes.



Expectorate, but do not rinse.



Refrain from eating for 30 minutes.

Conclusion

The MI Paste Family with the power of RECALDENT™ Technology, offers a non-invasive yet highly effective approach to managing various dental concerns. These products cover a wide range of indications for your patients, including the teeth sensitivity of ortho patients, scaling and root planning sensitivity, effective treatment of white spot lesions, and helps prevent gingivitis.

Moreover, the ease of use and convenience of incorporating MI Paste products into daily oral care routines empower patients to take proactive steps in maintaining optimal dental health. Overall, the MI Paste Family is an excellent line of preventive products for simple and effective at-home care.



LEARN MORE:

Since 1983, DENTAL ADVISOR has been a trusted expert to dental professionals worldwide with concise, accurate, and objective information.

We combine clinical experience with laboratory data and report on long-term in-vivo performance of materials over time.

The mission of DENTAL ADVISOR is to provide the dental profession with evidence based and clinically relevant information on dental restorative products, infection control products and dental equipment.

DENTAL ADVISOR reports objective clinical evaluations, product comparisons, comprehensive long-term clinical performance studies, and unbiased laboratory test results.

MI PASTE ONE PERIO CLINICAL VIDEO



MI PASTE ONE PERIO CLINICAL EVALUATION



MI PASTE PLUS CLINICAL EVALUATION



MEET THE MI PASTE FAMILY VIDEO

