

nanoXim
CAREPASTE

NANO-HYDROXYAPATITE

THE FUTURE OF ORAL CARE: AN ALTERNATIVE TO FLUORIDE

✓ To enhance enamel remineralization

✓ To reduce dental hypersensitivity

✓ To restore natural whiteness



ABOUT US

FLUIDINOVA was founded in 2005 in Portugal as a specialized manufacturer of synthetic hydroxyapatite and tricalcium phosphate materials, which are commercialized worldwide under the brand nanoXIM®. Our products are pivotal in various fields, including cosmetics, dental care, medical devices, functional foods and food supplements.





Can I effectively develop a fluoride-free oral care product?

YES, you can!

An alternative to fluoride is Hydroxyapatite – a 100% safe and non-toxic ingredient to oral care products and routine.

**nanoXIM•CarePaste is a
nano-hydroxyapatite (nano-HAp)
ingredient produced and marketed
by FLUIDINOVA.**

Its excellent performance is related to its nanometer size, being very similar to natural teeth.

BENEFITS



Pain reduction



Smooth and protected
tooth surface



Dental hypersensitivity
prevention



Enamel remineralization



Cavity prevention



Restored natural whiteness



What is Hydroxyapatite?

Hydroxyapatite (HAp) is a form of calcium phosphate that makes up to 97% of tooth enamel and 70% of dentin. Since it is a key component of teeth, it is biocompatible; our body recognizes HAp as a familiar compound.

Thus, products that incorporate HAp simulate the natural composition and structure of teeth, which is why they work effectively.



1.

Dental hypersensitivity, a short and sharp pain, prevents us from drinking hot coffee, ice cream, or even an orange juice without feeling pain. The action of certain food and drinks (hot, cold, acidic) are considered aggressions to our teeth, resulting in the exposure of dentin tubules and the underlying nerves to the external environment (the dentin loses its protective covering).



2.

nano-HAp has a great potential in the treatment of dental hypersensitivity, as its nano-sized particles can be incorporated inside the dentin tubules. Consequently, these become sealed and pain is reduced.



3.

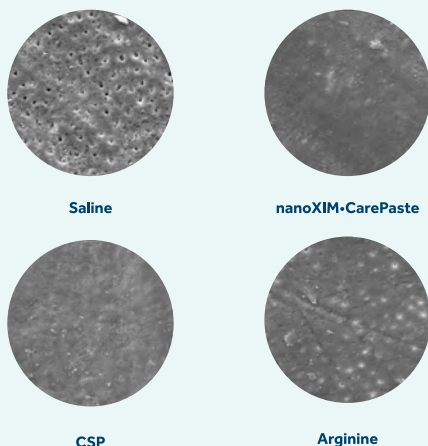
As a result, a new layer is formed, remineralizing the tooth enamel and protecting the tooth surface, preventing the appearance of new cavities and making it resistant to acid attacks of our favourite meals.



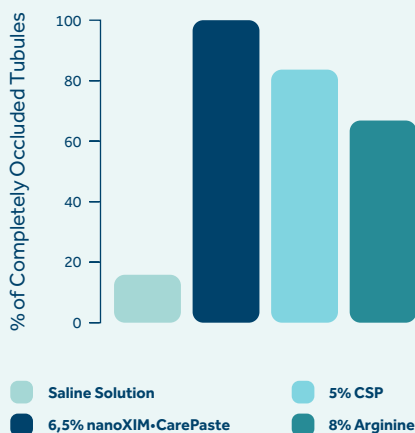
4.

The deposition of nano-HAp on the enamel surface improves its smoothness for better light reflection, and consequently brighter and whiter teeth.

The effectiveness of nanoXIM•CarePaste has been confirmed in numerous studies:



Scanning Electron Microscopy images of dentin discs treated daily with saline solution (negative control), 6,5% **nanoXIM•CarePaste**, 5% Calcium Sodium Phosphosilicate (CSP), and 8% Arginine for 2 minutes during 7 days (real examples).



Percentage of completely occluded dentin tubules after 7 days of a two-minute daily treatment with the different desensitizing agents.

This study demonstrated that nanoXIM•CarePaste was the most effective desensitizing agent, showing almost complete tubule occlusion during the treatment period.

Reference: R. Kulal et al., J. Clin Diagn. Res., 10(10), p. 51 (2016).

FEATURES

- Synthetic aqueous suspension ingredient
- 15,5 wt% nano-HAp
- Particles size < 100 nm
- Rod-shaped particles
- Relative Dentin Abrasion (RDA) < 10
- High purity
- Biocompatible
- Paraben-free
- Vegan
- SCCS approved

nanoXIM•CarePaste is the recommended ingredient for water-based formulations.

It is incorporated in toothpastes, gels, mouthwashes, dental floss, and other oral care products (personal and professional use).



Toothpastes



Gels



Mouthwashes



Dental Floss

We aim to innovate
and improve the
Oral Care industry.

If you want to be part of this
journey, contact us! ↓

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