Apa Care

Liquid Enamel
The liquid enamel (medical hydroxyapatite) contained in ApaCare boosts the remineralisation of the teeth. ApaCare Repair is particularly helpful in reducing initial decay as well as discolorations, such as white spots. Superficial pores and small defects (e.g. fine cracks) are filled by the liquid enamel in ApaCare and are demonstrably reduced.

ApaCare reduces sensitivities and hypersensitivities.

The liquid enamel (medical hydroxyapatite) contained in ApaCare covers open dentinal tubules in the tooth and in exposed tooth necks. ApaCare Repair is particularly effective in reducing sensitivities, such as painful heat/cold or sweet/sour sensitivity. ApaCare also protects against tooth erosion, e.g. caused by acidic drinks or food.

ApaCare whitens teeth, protects and smooths them. ApaCare prevents from plaque and biofilms.

Hydroxyapatite is a natural whitening agent. When the liquid enamel (medical hydroxyapatite) contained in ApaCare is applied, e.g. by brushing your teeth or rinsing, it forms a very thin protective layer on the tooth surface and whitens it. Bacteria, plaque and discolourations just drip off.
ApaCare® Toothpaste

2 to 3 times daily

ApaCare® Remineralising toothpaste

Liquid enamel smooths, seals and whitens teeth.

ApaCare Toothpaste contains sodium fluoride (1450 ppm F-) and liquid enamel (medical hydroxyapatite). This highly active mineral attaches to and is embedded into the surface of the teeth during the daily brushing. The combination of fluoride and medical hydroxyapatite has a synergistic effect.

For adults and children, particularly suitable in case of a high susceptibility to caries, sensitive teeth and after acidic meals (RDA approx. 50).

Tube 75 ml

Art. no. 1001619
ApaCare® Repair
Intensive-Repair, once a day
Tooth Conditioner and Repair/- Desensitizer- / Whitening-Gel.

ApaCare Repair is highly enriched with medical hydroxyapatite. ApaCare Repair intensive repair is used after brushing your teeth and is simply applied by using your finger or toothbrush.

The liquid tooth enamel covers the teeth with a very fine protective layer. The teeth are whitened and coated with a glossy layer that repels bacteria and plaque. It greatly reduces sensitivities, repairs initial caries, pores and asperities and boosts regression of white-spot discolorations. ApaCare Repair does not contain any abrasive substances (RDA < 10).

Tube 30 ml

Art. no. 1001620
ApaCare® Polish
Tooth polishing paste
1 to 2 times weekly

ApaCare® Polish
Tooth polishing

Liquid enamel for shiny white teeth

You can polish your teeth 1 to 2 times weekly with ApaCare Polish tooth polishing paste. In addition to fluoride (1450 ppm F-) and medical hydroxyapatite, the polishing paste contains special particles with great cleaning strength (RDA approx. 180).

Particularly recommended in case of discolorations caused by coffee, tea, red wine and nicotine.

Tube 20 ml

Art.-no. 1001244
ApaCare® Liquid
Antibacterial mouthwash for caries and periodontitis prevention / twice daily, 20 s

ApaCare® Liquid
Antibacterial tooth and mouth balm

Liquid enamel persistently reduces initial caries and periodontal bacteria.

Antibacterial tooth and mouth balm with medical hydroxyapatite. During rinsing, the hydroxyapatite minerals attach to the teeth and enter interdental spaces, cracks and defects. The teeth become nicely smooth and glossy. Essential oils fight pathogenic biofilms and bacteria. ApaCare Liquid does not contain alcohol.

Bottle 200 ml

Art. no. 1001402
BIOLactis® Oral Probioticum

Once a day after a meal for 60 sec.
melt in the oral cavity

Dental care cosmetic to aid in the prevention of caries and periodontitis

For oral use for daily dental and oral care. With fresh taste. The tasty powder protects from caries and periodontitis with its high-quality probiotic ingredients, restores the balance of the healthy oral flora and strengthens the natural defense mechanisms in the mouth. BIOLactis also protects against bad breath and supports the reduction of plaque and gingivitis.

Recommendation:
BIOLactis® is suitable for all age groups (from the 3rd year of life).

Each Sachet contains at least 1 billion probiotic microorganisms from three different strains, which can favorably influence the bacterial colonization of teeth, gums, tongue and oral mucosa.

30 Sachets (30 x 1g)

Art. no. 1100010
ApaGum Anti-Caries Chewing Gum

2 pieces of gum, 3 times daily

ApaGum Anti-Caries Chewing Gum

Anti-caries chewing gum with 100% xylitol and important enamel minerals.

The sugar-free ApaGum anti-caries chewing gum contains xylitol, a pleasant-tasting, naturally occurring sugar substitute (also known as birch sugar), which contributes to the reduction of bacteria that cause caries in the oral cavity. Together with the tooth enamel minerals calcium and phosphate contained in ApaGum, it has a lasting positive effect on the remineralisation and repair of damaged enamel.

- Prevents caries for up to 100%
- Can contribute to the repair of damaged enamel (initial caries)
- Boosts the formation of a balanced oral flora; does not stick

Recommendation:

Children 3 years and older: 3 x daily 1 piece of chewing gum
Adolescents (12 years and older) / adults: 3 x daily 2 pieces of ApaGum chewing gum

Sweetened with 100% Xylitol

Treatment Pack (24 blisters)

Art. no. 1100001

- Single pack (blister with 12 pieces)
- 6-week treatment pack (24 blisters)

1) If used regularly in sufficient quantities and in conjunction with good oral hygiene.
2) Excessive consumption may induce laxative effects.
ApaCare® Professional

Polishing paste for professional dental hygiene

ApaCare® Professional

One-Phase polishing paste for professional dental hygiene in dental surgeries, based on medical hydroxyapatite and with sodium fluoride.

Universal dental hygiene and polishing paste with great cleaning strength and innovative perlite cleaning particles (RDA = beginning 150, reduces during polishing). High PCR = 130 (Pellide Cleaning Ratio). Efficient removal of plaque and staining. After polishing, the tooth surfaces feel particularly smooth and very pleasant to the patient.

Cumdente ApaCare Professional is enriched with medical hydroxyapatite, which attaches to the tooth surface during polishing and covers sensitive dentine tubules. ApaCare Professional polishing paste contains sodium fluoride and is free of preservatives.

Particularly recommended following periodontal therapy and professional dental hygiene.

Tube 75 ml

Art. no. 1000932 / Art. no. 1000933
ApaCare® Desensitizer Varnish

For sensitive tooth necks and professional remineralisation

ApaCare® Desensitizer Varnish

For use in case of sensitive tooth necks and for the remineralisation of initial caries.

Natural mineralising adhesive tooth varnish with 20% medical hydroxyapatite (liquid enamel).

A natural protective, biocompatible, shellac-based varnish layer will form after evaporation.

Each vial contains 5 ml.

Art.-no. 1040100
ApaPearls®
Air polishing powder
based on calcium carbonat particles
with medical hydroxyapatite

The new ApaPearls® air polishing powder consists of rounded calcium carbonate particles (Pearls) coated with fine medical hydroxyapatite (synthetic enamel). With a very small grain size of 45 μm, tooth and root surfaces can be gently cleaned and at the same time supplied with important minerals. Micro defects are sealed, sensitivities reduced. Due to the porous structure of the enamel particles, they disintegrate when they hit the tooth and root surfaces and form a protective layer. Periodontal healing and regeneration is supported.

Bottle 250 g

Art.-no. 1001417
Study design:
In a study conducted at Charité University Hospital Berlin, toothpastes containing nano-hydroxyapatite were compared with an amine fluoride toothpaste. Demineralised bovine tooth specimens were deposited in artificial saliva (according to ISO 11609) for 2 and 5 weeks, and they were brushed twice daily with each toothpaste for 5 seconds (total contact time twice 120 s / d).

Results:
Under these conditions, both nano-hydroxyapatite (ApaCare Repair) and zinc-carbonate nano-hydroxyapatite showed a significantly higher mineralisation with regard to dentine, compared to the amine fluoride toothpaste. For enamel, nano-hydroxyapatite (ApaCare Repair) shows significantly higher mineralisation compared to amine fluoride.


Study design:
Light microscope (polarized light microscopy), scanning electron microscope, x-ray (contact micro radiography) and microsensor study of artificial caries lesions on enamel before and after treatment with artificial saliva and a hydroxyapatite suspension.

Results:
Remineralisation of the enamel surface (A) and the subsurface areas (B) was increased by application of an aqueous hydroxyapatite suspension.

ApaCare remineralizes more strongly and significantly reduces roughness compared to a fluoride toothpaste

Study design:
90 human teeth are embedded into acrylic and polished. They are divided into two test groups and one control group. The microhardness is determined by the Vickers method, while the surface roughness is determined by means of a profilometer. The samples are demineralised to simulate tooth decay. Then half of the sample is covered with a paint and treated with either the two toothpastes or a placebo in a 3-week cycle.

Results:
The study hints at the added advantages of nano-hydroxyapatite when used as an additive in fluoride toothpaste. Compared to a standard fluoride toothpaste, ApaCare leads to a greater increase in microhardness and a statistically significant decrease in roughness. We can conclude from these results that there is an additive effect of nano-hydroxyapatite when used with fluoride. These observations support the assumption that nano-hydroxyapatite can be incorporated directly into a carious lesion.


Nano hydroxyapatite inhibits new caries (ApaCare Repair Intensive Repair, ApaCare Liquid)

Study design:
Demineralised teeth were dipped in suspensions of needle-shaped and spherical nano hydroxyapatite, and the increase in hardness (Vickers hardness) was measured against physiological saline solution, fluoride solution, and a suspension of crystalline hydroxyapatite.

Results:
Nano hydroxyapatite causes strong remineralisation of affected dental enamel.


Combined Effects of Nano-Hydroxyapatite and NaF on Remineralisation of Early Caries Lesion (ApaCare remineralising toothpaste)

Study design:
It is known that fluorides in mouthwashes can significantly accelerate the mineralisation of the tooth substance. In contrast, nano hydroxyapatite acts directly on the tooth substance and leads to an increase in mineral intake. The aim of this study is to determine the extent to which mineralisation effects are comparable to this and whether a combination of fluoride and hydroxyapatite can lead to an additional effect.

Results:
Both fluorides (combined with saliva) and nano hydroxyapatite (also without saliva) lead to a measurable increase in surface hardness, thereby causing remineralisation. The combination of fluoride with nano hydroxyapatite leads to a clear, synergistic increase in mineral intake.

Study design:
Randomised study with 181 children (92 boys, 89 girls) from different Japanese schools over a period of 3 years. After lunch the children brushed their teeth under supervision with a toothpaste containing 5 % hydroxyapatite and a control group with a paste without hydroxyapatite. Yearly controls of the DMFT index were diagnosed as well as the caries incidence on newly erupted teeth.

Results:
• The DMFT index was significantly deeper in the apatite group.
• The incidence for caries in newly erupted teeth was significantly lower compared to control.

Incidence of Caries (New DMFT rate)
1. Representing all healthy teeth at the start of the study.
2. Concerning all newly erupted teeth during study.

Sealing enamel

**Hydroxyapatite seals bleached enamel (ApaCare Repair Intensive Repair)**

**Study design:**
Cleaned samples of enamel from freshly extracted human teeth were sealed with nail varnish leaving a window and were treated with a bleaching cream containing 35% hydrogen peroxide. After the bleaching a part of the samples were polished with a hydroxyapatite containing suspension for 20 seconds.
The surfaces were examined and compared with a scanning electron microscope with a colour penetration test.

**Results:**
- The “cleaned” samples showed some signs from toothbrushing.
- The bleached surfaces were rougher than the non-bleached.
- The bleached samples treated with hydroxyapatite were smoother than without.
- The bleached as well as the hydroxyapatite treated samples showed some colour penetration whereas the penetration was deeper in the non hydroxyapatite treated group.

Ref: Kawamata H, Nishio M, Fujita K, Ishizaki T, Hayman R, Ikemi T: Posterpresentation 82nd General Session & Exhibition of the IADR / March 2004

Delayed plaque formation and smoother surfaces

**Hydroxyapatite suspensions lead to smoother teeth surfaces and reduce bacterial plaque formation (ApaCare Professional, ApaCare Professional home)**

**Study design:**
Under standardised conditions samples of enamel from freshly extracted human teeth were flat polished and treated with 3 polishing pastes with increasing RDA numbers (120/170/250) followed by remineralisation with a hydroxyapatite containing tooth cream. Examination of the surface was done by SEM (scanning electron microscope) for colonisation with streptococcus mutans bacteria.

**Results:**
- Roughness of the sample increased with the increased RDA numbers.
- Treatment with a hydroxyapatite paste formed a surface roughness lower than before polishing.
- After polishing, the speed of colonisation with SM germs increased significantly, and could be reduced successfully with the hydroxyapatite suspension.

Please note:

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