



Icon smooth surface
Effective treatment for white spots.



**The gentle answer to
white spots: I can Icon.**

Discolorations on the smooth surfaces?

THERE CAN BE DIFFERENT REASONS FOR THIS. THE REASON BEHIND WHITE SPOTS FORMING ON THE TEETH IS OFTEN THE ONSET OF CARIES.

Dental fluorosis, too, can be a reason for the visual damage. The good news: There is a simple, gentle treatment option.

Infiltration treatment with Icon smooth surface.

Infiltration with a highly fluid special resin was originally developed to stop early proximal caries without drilling. But the innovative therapy also makes the esthetic treatment of discoloration on dental surfaces possible.

**FOR A HEALTHY BEAUTIFUL SMILE.
WITHOUT DRILLING.**

Challenges in the dental practice.

INITIAL CARIES CAUSES DISCOLORATION ON THE SMOOTH SURFACES.

Until now there was no genuinely satisfactory treatment option available for these cariogenic white spots, which are often visible after bracket removal.

NOT EVERY SPOT IS A CARIOGENIC WHITE SPOT.

How can fluorosis, for example, or enamel developmental defects be treated appropriately? In other words: in a way that is permanently effective, efficient and comfortable for the patient?

Effective = invasive = tooth substance loss?

Bleaching alone will not achieve a consistently convincing result in most cases of tooth discoloration. Invasive treatment methods such as veneer restorations are time-consuming and costly. Furthermore, they always involve sacrificing healthy tooth substance.

IS THERE A WAY TO RESOLVE THIS PROBLEM RELIABLY AND GENTLY?

There is. You can.

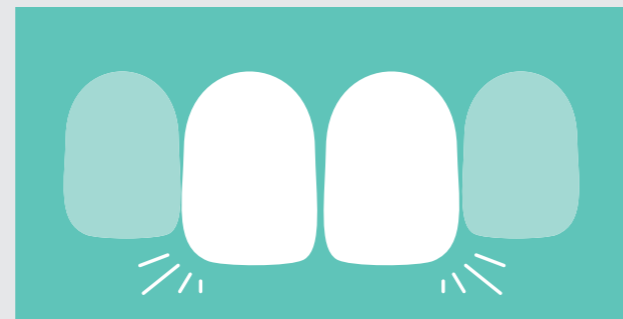
WHITE SPOT TREATMENT WITH ICON



Before treatment: Caries, fluorosis or enamel developmental defects have caused unesthetic discoloration.



After being prepared with an etching gel, liquid resin is applied, which penetrates into the porous tooth tissue where it cures under light.



The porous tissue is filled. The infiltrated area adapts optically to the healthy tooth thanks to a similar refractive index of infiltrant and enamel.

The answer: Caries infiltration treatment with Icon.

Infiltration treatment with Icon fills the gap between prophylaxis and filling. In addition, this treatment optically blends in the lesion with the healthy enamel. This innovative method can therefore be used for esthetic treatments of front teeth, where appearance plays an important role.

AN INGENUOUSLY SIMPLE PRINCIPLE

The infiltration method works quite simply: After pretreatment with an etching gel, the infiltrant, a highly fluid resin, is applied to the affected area. Capillary action draws the infiltrant deep into the porous enamel, and it is then light-cured.

This allows white spots to be disguised. The infiltrated area visually matches the natural enamel.

Healthy tooth structure is preserved.



The light refraction of the otherwise translucent enamel is changed, and the lesion has a whitishopaque appearance. The infiltration fills the porous tissue and at the same time, the lesion's color is aligned with the healthy enamel.

THIS METHOD IS SO COMPELLING, THAT MY ONLY QUESTION IS: WHY WASN'T THIS BEING DONE SOONER?

What sounds so simple was actually long hard work in research and development at the Charité Berlin, Kiel University (CAU), as well as at DMG. Many years and countless tests and studies were necessary before it was certain: Icon works.



The infiltration treatment consists of 3 easy steps:

ETCHING – DRYING – INFILTRATING.

All the materials required are contained in every Icon package.

1. ICON-ETCH

Icon-Etch prepares the tooth for infiltration. The HCl-Gel is applied to the affected area with the aid of our special applicator tip, removing the pseudo-intact surface layer. Only when this layer has been removed can the infiltrant penetrate into the pore system of the tooth.

2. ICON-DRY

For the next step of the infiltration process, a dry environment is necessary. To this end, the lesion is dried with Icon-Dry (ethanol) and air.

3. ICON-INFILTRANT

The low viscosity infiltrant is applied, and penetrates deep into the enamel through capillary action and it is then light-cured.

The infiltrated lesion has similar mechanical and visual properties to healthy enamel.



How-to film on DMG's youtube channel

www.youtube.com/dmgdental

ICON AND WHITE SPOTS



Initial situation: White spots after removing braces.



Result after treating with Icon-Etch.



Drying and visual check with Icon-Dry.



Application of Icon-Infiltrant.



Repeated application of Infiltrant.



Result directly after light-curing.



Result after polishing.



Patient a week after treatment.

Tips from the practice:

RE-ETCHING »OLDER« INACTIVE WHITE SPOTS

- > For successful esthetic treatment of white spots, the lesion must be fully accessible to the infiltration.
- > You can etch multiple times if there is a very thick pseudo-intact surface layer.
- > If the white discoloration disappears within a few seconds when ethanol (Icon-Dry) is applied, then it is sufficiently etched.
- > If the opaque discoloration remains, then the etching process should be repeated. Up to three etching steps for two minutes per lesion are possible.
- > Alternatively, the lesion can also be prepared for the infiltration through light abrasion with a polishing disc, micro abrasion, or sand blasting before the etching step.

BEFORE/AFTER DOCUMENTATION

- > Optimize your patient communication process by taking before and after pictures.
- > These photos give your patients definitive proof about the success of the treatment.

FLUOROSIS AND OTHER WHITE SPOTS

- > Even non-cariogenic enamel changes can be treated with Icon.
- > The effectiveness with mild to moderate fluorosis has been scientifically proven.*
- > Experience in the dental practice has shown that: Even patients with traumatic changes or mildly pronounced MIH could be treated successfully, whereby carrying out several etching steps proved effective. This has not yet been confirmed by clinical trials.

THE PATIENT CAN SEE THE IMPROVEMENT THEMSELVES. I DON'T HAVE TO SAY MUCH ELSE.

No unanswered questions: With white spots on smooth surfaces, both the patient and the practitioner can see the effect of caries infiltration for themselves. The vestibular application doesn't just solve an esthetic problem; it also gives reassurance for possible use in proximal areas.

A winning smile?
Yes please!



*Comparative Evaluation of Resin Infiltration, Bleaching and Bleaching-with-Resin Infiltration in Esthetic Improvement of Non-Pitted Fluorosis, N. Gugnani, I.K. Pandit, V. Goyal, S. Gugnani, M. Gupta, S. Soni, J. Sharma, S. Dogra, Abstracts: 61th ORCA Congress

General recognition.

AWARD-WINNING

Among other awards, DMG received the »Deutschen Innovationspreis 2010« in the category »Mittelständische Unternehmen« for Icon. DMG was also recognized as a »Ausgewählter Ort 2009« by the initiative »Deutschland – Land der Ideen« (under the patronage of the Federal President of Germany). Icon was also awarded the »Innovationspreis 2009« by German dentists.



POSITIVE PRESS

Treating initial caries gently, pain-free, and esthetically? Unsurprisingly, there has also been tremendous public interest. The response to caries infiltration in the public media, as well as trade press, has been overwhelmingly positive.

CONVINCING STUDIES

For years, numerous international scientific studies have examined the clinical effectiveness of caries infiltration.

For more information on these studies and current results, see next page and visit our website at www.dmg-dental.com/icon

PRACTICE TESTED, DENTIST APPROVED

How do international dentists rate caries infiltration and their experiences in practice?

Here are a few opinions:

»As a minimally invasive procedure, it is very innovative and very pleasant for the patient.«

Dr. med. Gabriele Blatt, dentist, at br-online.de

» Advantage: Healthy tooth structure is hardly damaged, everything stays nice and white.«

Grazia, Magazine for fashion, lifestyle and beauty

»For us dentists, Icon is the missing piece in the puzzle between prevention and restoration. What I especially like is how scientifically well-documented the method was before it was brought to market.«

Dr. Marcio Garcia dos Santos MSc, PhD (Dentist), Brazil

»The benefits Icon offer me personally are to be able to play an active and preventive role in dentistry!«

Dr. Hervé Tassery (Professor and Hospital Practitioner – University of the Mediterranean Marseille), France

»I have been using Icon for over three years. As a Pediatric Dentist, Icon's non-surgical restorations have really proved extremely successful in treatment of white spot carious lesions. Icon is definitely my choice for preventive dentistry.«

Dr. Richard Chaet (Pediatric Dentist), USA

A focus on caries infiltration in international studies.

NUMEROUS IN-VITRO AND IN-VIVO STUDIES CONFIRM: INFILTRATION CAN ARREST THE PROGRESSION OF CARIOUS LESIONS AT AN EARLY STAGE. ALONGSIDE THE FUNDAMENTAL EFFECTIVENESS, MANY OTHER DETAILED ASPECTS OF THE PROCEDURE HAVE BEEN RESEARCHED. HERE IS A SELECTION OF SOME OF THE ESPECIALLY INTERESTING RESULTS:

Icon works on primary teeth as well.

Ekstrand et al. demonstrated the effectiveness of caries infiltration in a randomized, controlled, split-mouth study on children.¹

Infiltration enables long-term esthetic shade matching.

A study by **Torres et al.** showed Icon-Infiltration to be the only application that enabled the lesion to match the shade of the healthy enamel, with the greatest effects coming after eight weeks.²

Follow-up in-vitro studies showed that infiltrated teeth appeared lighter at first, but then came to match the natural tooth shade and remained shade stable.^{3,4}

Patients welcomed the method.

Howard Glazer was the first to document experiences of the treatment of white spots using infiltration. He reported that he received consistently good feedback from patients, who particularly welcomed the minimally invasive treatment and were satisfied with the esthetic results.⁵

The caries infiltration also stands up to critical examination.

The independent international Cochrane Collaboration has analyzed different micro-invasive treatment methods for proximal caries lesions according to strictly evidence-based criteria. The authors summarily describe caries infiltration as a suitable minimally invasive treatment option.⁶



Sources

- 1 Ekstrand KR, Bakhshandeh A, Martignon S (2010); Treatment of proximal superficial caries lesions on primary molar teeth with resin infiltration and fluoride varnish versus fluoride varnish only: efficacy after 1 year; Caries Res 44(1):41-46
- 2 Torres CRG, Borges AB, Torres LMS, Gomes IS, de Oliveira RS (2011); Effect of caries infiltration technique and fluoride therapy on the colour masking of white spot lesions; J Dent 39(3):202-207
- 3 Perry R, Nobrega D, Harsono M (2010); Bleaching of Teeth Treated with Icon by DMG America, Data on file; DMG, Hamburg, Germany
- 4 Shah S, Cakir D, Ramp LC, Beck P, Burgess JO (2011); Color Stability and Stain Resistance of ICON Caries Infiltrant Resin; IADR Congress Abstract
- 5 Glazer HS (2009); Treating White Spots: New Caries Infiltration Technique; Dent Today 28(10):82, 84-85.
- 6 Dorri, M., et al. (2015). Micro-invasive interventions for managing proximal dental decay in primary and permanent teeth. Cochrane Database Syst Rev 11: CD010431



INVASIVE THERAPY FOR AN ESTHETIC PROBLEM? UNTIL NOW, THERE HASN'T BEEN A SIMPLE, SUITABLE TREATMENT OPTION FOR WHITE SPOTS.

Etching, drying, »filling« with a liquid resin: Infiltration delivers gentle and visible results quickly – and it's easy to explain to the patient. This is a win-win for both sides.



GOOD REASONS

- Esthetic results on smooth surfaces
- Caries arrest at an early stage
- Preservation of healthy tooth structure
- Pain-free method, without anesthesia, or drilling

Treatable lesions per sales unit		
Sales unit	Starter Pack	Economy Pack
Treatment units	2	7
Treatable lesions	4 – 6	14 – 21



PRODUCT OVERVIEW

Icon smooth surface		
Starter Pack	2 Treatment units each including: 1 Syringe @ 0.45 ml Icon-Etch, 1 Syringe @ 0.45 ml Icon-Dry 1 Syringe @ 0.45 ml Icon-Infiltrant, 6 Vestibular-Tips, 1 Luer-Lock-Tip	REF 220343
Economy Pack	7 Treatment units each including: 1 Syringe @ 0.45 ml Icon-Etch, 1 Syringe @ 0.45 ml Icon-Dry 1 Syringe @ 0.45 ml Icon-Infiltrant, 6 Vestibular-Tips, 1 Luer-Lock-Tip	REF 220238
Refill Icon-Etch	3 Syringe @ 0.45 ml Icon-Etch, 15 Vestibular-Tips	REF 220384