

GC

Choice of Pink & White

Both protect and keep you in the

PINK OF HEALTH

Fuji 7

(Now available in shades of pink and white)



Fuji 7 in PINK



Fuji 7 in WHITE

GC Fuji VII

WHY A GLASS IONOMER FOR PROTECTION AND STABILIZATION?

As our understanding of the caries process grows, new techniques and strategies for the prevention and control of caries are being more widely practiced. A purpose designed glass ionomer is needed for these new applications:

Protection of erupting molars. Increasing rates of childhood decay has lead to a greater demand for preventive intervention solutions that can be placed during the prolonged eruption phase when the occlusal surfaces of permanent molars are at most risk of decay.

Protection of exposed root surfaces. Demographic trends describe a rapidly increasing elderly population with more retained teeth. Unfortunately these patients are often at higher risk of dental disease and exposed root surfaces in these patients require additional protection.

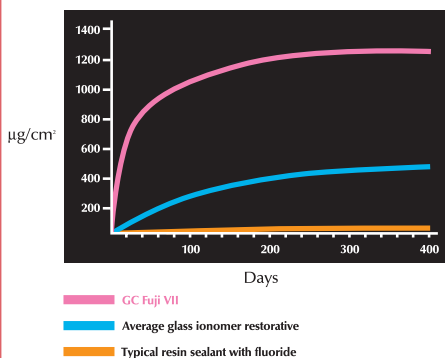
Caries stabilization and internal remineralization of active lesions. An effective seal via a high fluoride releasing glass ionomer is essential to the success of these minimally invasive techniques.

Restoration of micro-cavities. A flowable glass ionomer is needed for ultra small cavities.

GC Fuji VII – PURPOSE DESIGNED

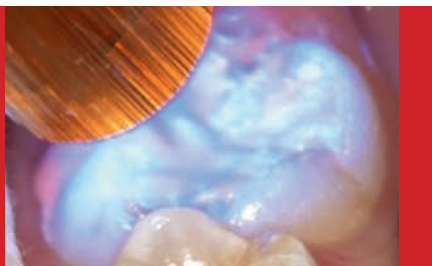
GC Fuji VII is designed as a high fluoride releasing glass ionomer with a free-flowing consistency to ensure effective wetting and intimate adhesion to tooth surfaces. The fine fluoroaluminosilicate glass filler allows a smooth surface finish and the incorporation of strontium in the glass provides radiopacity, enhanced remineralization capabilities and a sharp snap set. The setting characteristics can be further accelerated by use of a halogen light curing device for 20-40 seconds (pink shade only).

Cumulative Fluoride Release



Now available in pink or white

Dr.H.Ngo



SPECIAL PINK SHADE

For many different applications clinicians have sought a contrasting shade in restorative material either for clear identification of margins, for communication of clinical status or as a visual reminder of its temporary nature.

Therefore the original GC Fuji VII has a pink chroma offering easy identification for both you and your patient while keeping the shade low in value to help it blend into the oral environment.

NEW WHITE SHADE

The white shade of GC Fuji VII is indicated for clinical situations where a tooth coloured material is desirable and the need for clear visual recognition is out-weighed by the aesthetic demands of the patient or parent.

Fissure protection on clearly visible molar surfaces, minimal fissure filling in erupted molars and caries stabilization in lower anteriors are all examples of where GC Fuji VII White can be used.

UNIQUE COMMAND SET

GC Fuji VII sets in around four minutes. However, it can be reduced when using the pink shade to just 20-40 seconds by using a halogen curing light, as the pink colour absorbs light energy, accelerating the setting reaction.



Dr.G.Milich

GC Fuji VII Solutions

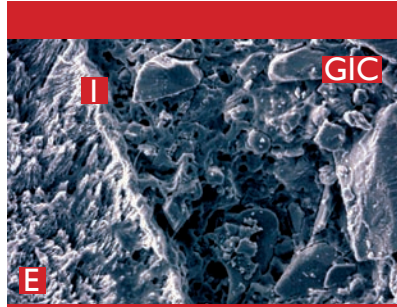
SURFACE PROTECTION

What is surface protection?

Surface protection describes the application of a thin film of glass ionomer (GIC) to tooth surfaces that are at increased risk of caries or erosion. The objective of surface protection is to create a hardened tooth surface using a glass ionomer reaction to form a more acid-resistant ion exchange zone (I – shown opposite) which acts as additional protection for the tooth.

A flowable, high fluoride releasing glass ionomer is ideal for this application. Glass ionomer is moisture tolerant during application and is therefore well suited to use as a protection material where saliva control can be compromised – e.g. erupting molars.

Once set, the thin layer of glass ionomer also acts as a protective coating preventing acid contact with the tooth and providing a surface which is difficult for plaque to adhere to.



Dr. H. Ngo



Dr. J. Lucas



Dr. M. Gryst

GC Fuji VII Solutions

ROOT SURFACE PROTECTION

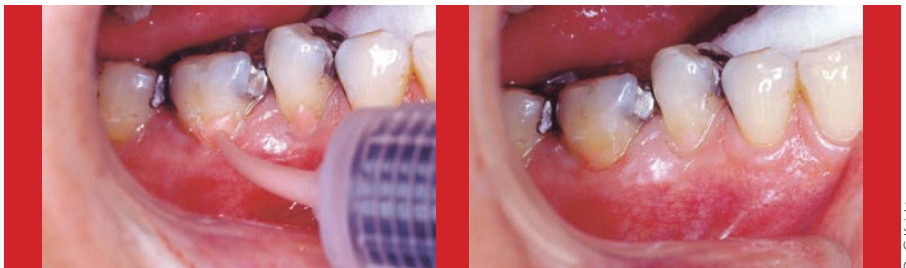


Dr. H. Ngo*

With an ageing population, root surface caries and cervical erosion have become a daily challenge. Once exposed to the oral environment root surfaces are at risk of developing caries, which is more severe for patients with reduced saliva flow, diminished buffering and poor remineralization capabilities.

Root surface protection describes the application of a thin film of glass ionomer to

exposed root surfaces for those patients with an increased risk of caries or erosion. The free-flowing consistency of GC Fuji VII is well suited to brush application and the unique pink shade is a useful identification check for you and your patients, confirming that the coated root surfaces remain protected. Root surfaces protected by GC Fuji VII should be monitored on a regular basis to establish and maintain a balanced oral environment.



Dr. G. Knight

GC Fuji VII can also be used for treating dentine hypersensitivity by providing a seal to

stop fluid flow in the tubules for instant long lasting relief.

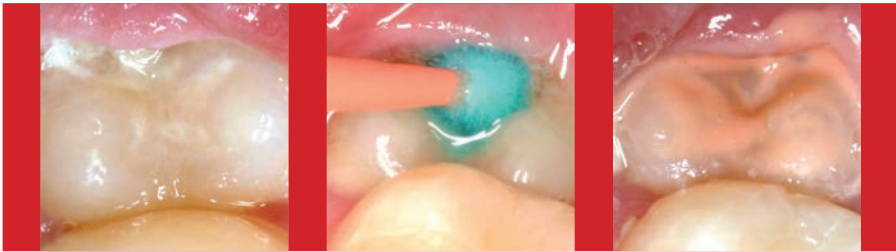
* Reproduced with permission from *Preservation and Restoration of Tooth Structure*, 2nd edition, GJ Mount, WR Hume.

GC Fuji VII Solutions

FISSURE PROTECTION

Fissure protection is a non invasive treatment procedure for patients at higher risk of developing caries which is undertaken as early as possible during the eruption phase of the first and second permanent molars. It is during eruption that these teeth are at most risk of developing caries due to the increased levels of plaque retention, immaturely formed enamel and the length of time taken to achieve full eruption.

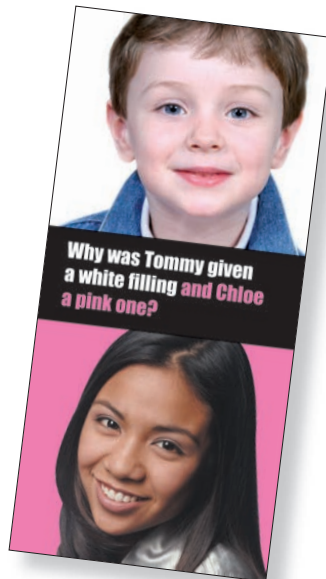
GC Fuji VII is ideal for fissure protection due to its moisture tolerance during placement and the nature of the ion exchange adhesion between glass ionomer and enamel. This creates a strong chemically-fused layer which is more acid-resistant and will continue to offer protection to the occlusal surface even when it appears visually 'lost' (as a result of attrition from the opposing dentition when fully erupted).



Dr. H. Ngoo*

The pink shade is especially useful when moisture control is difficult as the setting reaction can be accelerated using a halogen curing light. The pink shade is also an excellent visual reminder that protection is in place. Patient brochures are available which explain fissure protection, the benefit of using a pink shade as a visual marker and what changes are seen as the protected molar comes into occlusion.

* Reproduced with permission – Sharjah and MI2020 Projects
School of Dentistry, University of Adelaide

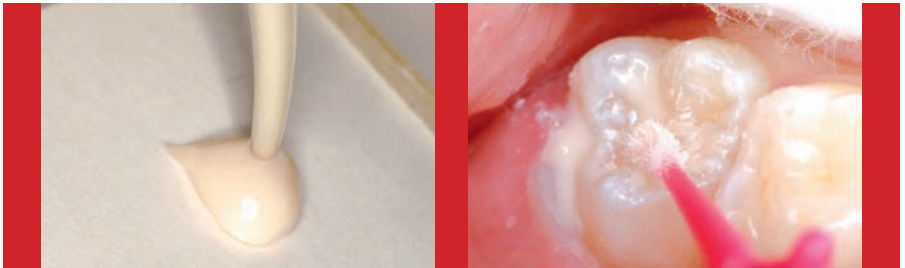
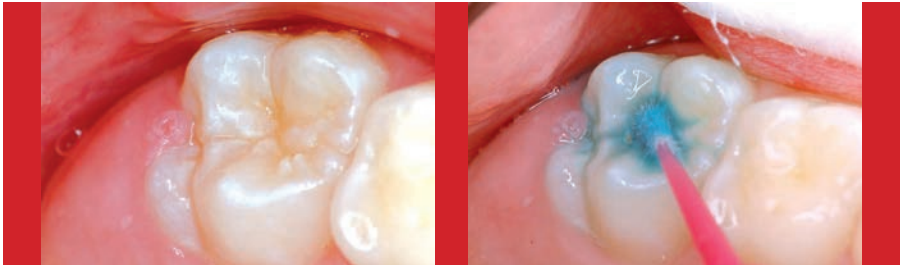


Fissure Protection

TECHNIQUE TIPS

- Mechanically remove plaque from the fissures using a brush cone
- Apply GC Cavity Conditioner to further clean the occlusal surface
- After rinsing avoid over-drying the tooth
- Spread a thin film of GC Fuji VII over the occlusal surface, including pits and fissures, with a micro-brush or similar
- Apply Cocoa Butter or Fuji Varnish immediately following placement

GC Fuji VII IS NOW AVAILABLE IN WHITE SHADE.



GC Fuji VII Solutions

TEMPORARY ENDODONTIC SEALING MATERIAL

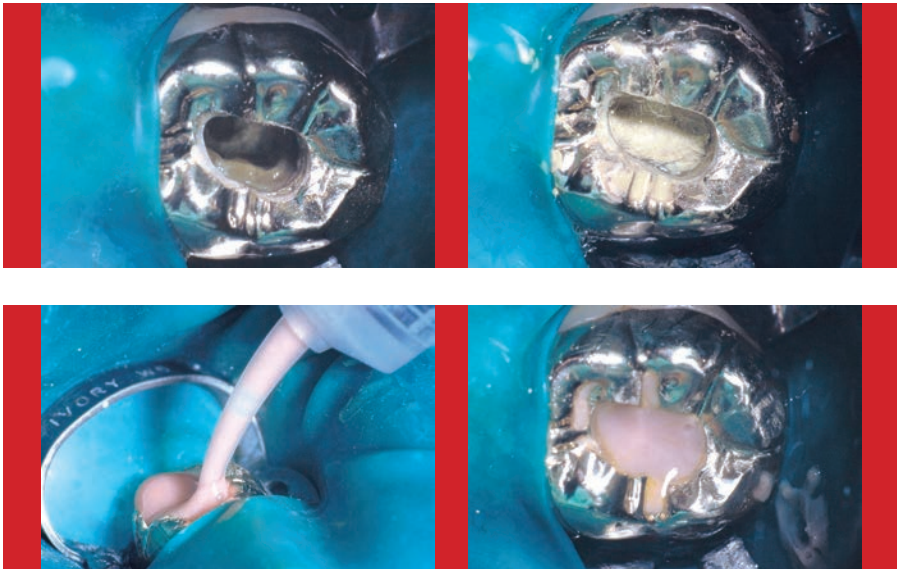
GC Fuji VII is ideal for this application where it can be used as a temporary seal between endodontic treatments.

The ion exchange adhesion will ensure an effective coronal seal which is proof against microleakage and possible further contamination of the operative area.

The contrasting pink shade aids fast removal when the next stage of treatment

is undertaken and, if it is desirable to reseal the canal before final restoration, a new increment of GC Fuji VII will strongly adhere to the original glass ionomer material.

The pink shade provides contrast without compromising aesthetics and following completion of the root canal therapy it will make an ideal base for any chosen restorative option such as amalgam or composite laminate.



Dr. H. Ngo

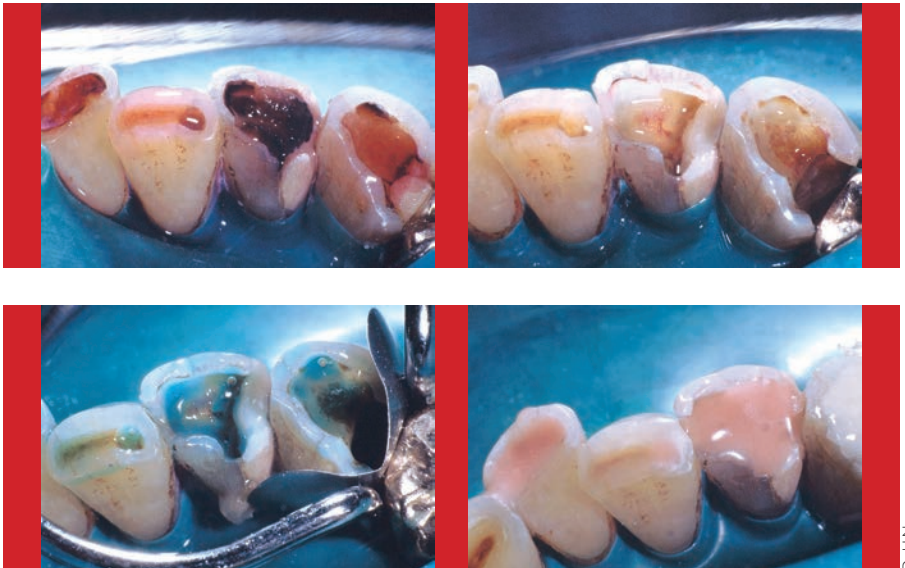
GC Fuji VII Solutions

CARIES STABILIZATION

This purpose-designed material seals demineralized dentin in both the primary and permanent dentition. Minimally invasive preparation techniques using an ultra-slow handpiece or hand instruments enable removal of only the softest dentin; however to achieve a successful seal, the prepared cavity still requires 2mm of clean margins around the periphery of the cavity.

GC Fuji VII has a free-flowing consistency and once placed there is a choice of autocure or command set with 20-40 secs light curing.

Stabilization techniques are relevant for many areas of dentistry, from treatment of the elderly, caries prone and dental phobic patients, through to the very young and medically compromised.



GC Fuji VII Solutions

INTERNAL REMINERALIZATION

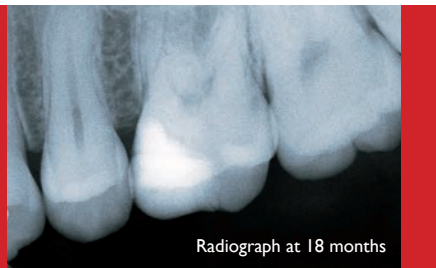
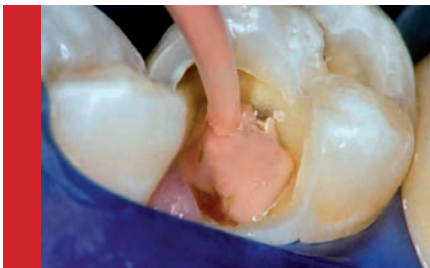
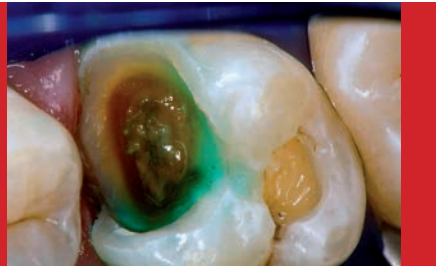
Internal remineralization describes the process of leaving a thickness of dentin, even softened demineralized dentin, intact on the pulpal floor. This is used as a strategy to remove the risk of mechanical exposure of the pulp during cavity preparation and to provide a seeding site and the potential for internal remineralization.

GC Fuji VII is placed with the primary function to provide an effective seal and to allow time for the pulp to heal.

Providing the patient does not present with symptoms of irreversible pulpitis, this

technique is indicated for very deep cavities where further excavation would increase the risk of pulp exposure that could potentially lead to endodontic treatment or even extraction.

Success is dependent on good case selection, by carefully considering the initial status and proximity of the pulp. In order to gain an effective cavity seal it is important to have a 2mm wide periphery of sound enamel (and dentin) surrounding the cavity outline.



Dr:H.Ngo

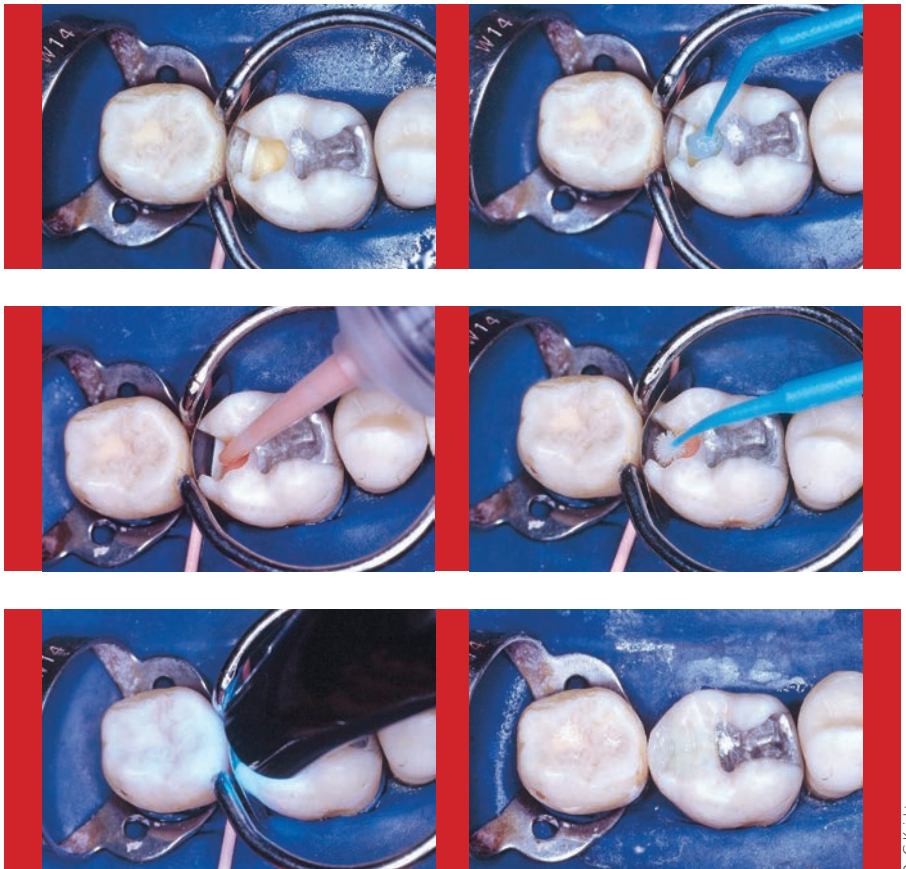
GC Fuji VII Solutions

LINING UNDER COMPOSITE OR AMALGAM

Many practitioners are concerned at the possible effects of un-reacted HEMA eluted from some of the current light cured glass ionomer lining materials and now prefer to use a low viscosity fast-setting conventional glass ionomer. GC Fuji VII capsules feature a long fine-tipped nozzle that is ideal for direct placement of lining materials onto the floor

of the cavity ensuring fast application and excellent cavity adaptation without risking air entrapment.

GC Fuji VII can be used with complete confidence as a liner as it will provide an excellent seal for the dentin, is radiopaque, releases fluoride and can be light cured for accelerated set (pink shade only).



GC Fuji VII Solutions

MINIMAL RESTORATIONS

The increasing use of minimal preparation techniques to remove the first areas of softened tooth structure, or to explore stained fissures, has created a need for a more flowable glass ionomer that will adapt well to micro prepared cavities. For erupted teeth GC Fuji VII White is the preferred glass ionomer solution due to its ease of access, fast set and smooth surface finish.

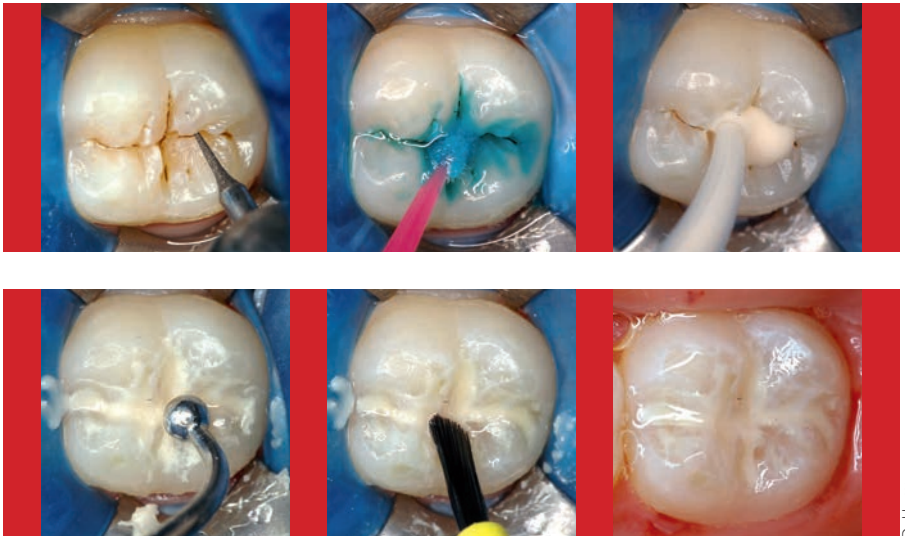


Dr. G. Müllich

Minimal Restoration

TECHNIQUE TIPS

- ❖ This technique is suitable for restoring fissures that have been prepared using ultra-fine diamonds or air abrasion.
 - ❖ Always condition the prepared fissures to maximize adhesion with a cavity conditioner for ten seconds.
 - ❖ Rinse the conditioner and remove excess moisture with a sponge or cotton pledget but avoid over-drying the tooth.
 - ❖ To ensure good adaptation into the prepared fissures and surrounding surfaces
- place the tip of the Fuji VII nozzle directly onto the prepared surfaces and inject into the fissures.
 - ❖ A ball burnisher is used to contour the unset glass ionomer. The burnisher can be lubricated with Cocoa Butter or Fuji COAT to aid manipulation.
 - ❖ Apply a varnish or light cured protective coating material immediately following placement.

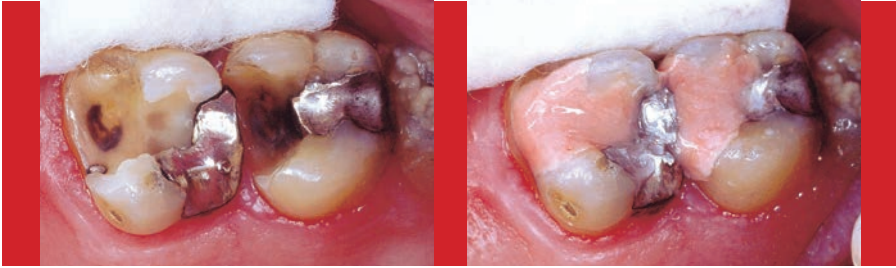


GC Fuji VII Solutions

INTERMEDIATE RESTORATIONS

GC Fuji VII is clearly identifiable to the patient as a temporary solution, just one part of a complete treatment strategy.

Quick and simple to apply, GC Fuji VII is a great choice for temporary and intermediate restorations.

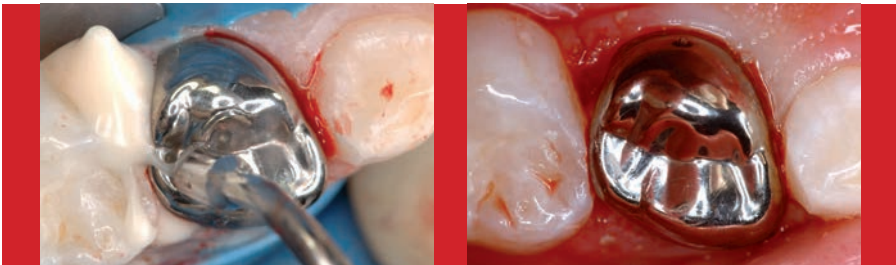
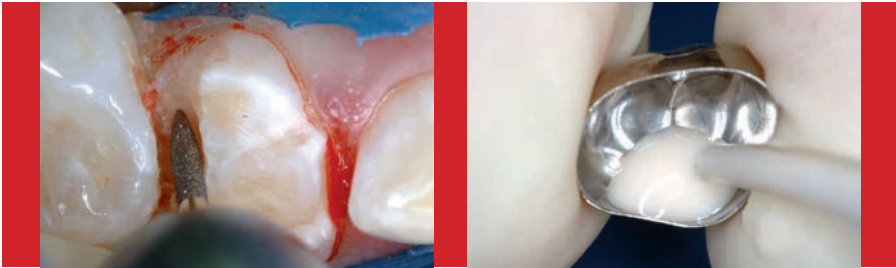


Dr. G Knight

CEMENTING STAINLESS STEEL CROWNS

GC Fuji VII's free flowing consistency, high fluoride release and sharp set make it

especially suitable for cementation of stainless steel crowns using either the pink or white shade.



Dr. J Lucas

GC Fuji VII

PHYSICAL PROPERTIES

Powder/Liquid Ratio (g/g)		0.30/0.15
Net Volume (ml)		0.15
Working Time		1'40"
Setting Time	Without Light Irradiation With Light Irradiation*	2'30" 20"-40"
Water Sensitivity	Without Light Irradiation With Light Irradiation*	3'00" 2'00"
Compressive Strength (Mpa)	After 1 Hour After 1 Day After 7 Days	100 159 171
Adhesive Strength (Mpa After 1 Day)	Bovine Enamel Bovine Dentin	7.0 6.0
Surface Hardness (Hv)	After 1 Hour After 1 Day After 7 Days	26 39 48
Radiopacity (mm)		2.4
Fluoride Release microgram/cm ²	After 1 Day	197

* Halogen light curing device

SOME OF THE AVAILABLE REFERENCES FOR GC Fuji VII

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2. T. Noguchi, S. Kato, S. Akahane. *Comparison of the acid-resistance level of the dentine surface immersed with fluoride-releasing materials in artificial saliva*. Abstract 1986 – 81st General Session of the IADR, 2003, Göteborg, Sweden.
3. M.C. Peters, M. Jimenez, G.E. Poort, J.C. Fenno. *Antibacterial effect of various glass ionomers*. Abstract 0415 – 80th General Session of the IADR, 2002, San Diego, USA.
4. D.A. Covey, W.W. Johnson and L.R. Hopper. *Penetration of various pit and fissure sealants into occlusal grooves*. Abstract 3471 – 82nd General Session of the IADR, 2004, Honolulu, Hawaii.
5. J. Wanuck, S. Antonson, D.E. Antonson and B. De Santis. *Retention of surface protectant sealants on contaminated enamel surface*. Abstract 1729 – IADR, March 2005, Baltimore, Maryland, USA.
6. H.C. Ngo, J. McIntyre and G. Mount. *Ion-Transfer patterns across a thin film of set glass-ionomer: Fuji 7*. Abstract 3058 – IADR, March 2005, Baltimore, Maryland, USA.

GC Fuji VII

AVAILABLE IN ORIGINAL PINK SHADE



Includes 1 x 15g Powder, 1 x 10g (8.0ml) Liquid and 1 x 6g (5.7ml) Dentin Conditioner



Box of 50 Capsules

AND THE **NEW** WHITE SHADE



Includes 1 x 15g Powder, 1 x 10g (8.0ml) Liquid and 1 x 6g (5.7ml) Dentin Conditioner



Box of 50 Capsules



GC CAVITY
CONDITIONER



COCOA BUTTER



Fuji VARNISH



Fuji COAT LC

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