



**The body wants to heal,  
let's work with it**

A bi-phasic matrix for true bone regeneration.  
Built-in membrane function, high graft stability.



## A little history

Developed by clinicians for clinicians, EthOss® is the result of many years' experience with guided bone regeneration (GBR) and bone grafting in dental surgery.

The human body is amazing - it wants to heal. EthOss® has been created to work with it by using fully biocompatible materials to help true host bone regeneration. It is a synthetic material that quickly turns into bone to help speed along dental procedures.

EthOss® creates an environment rich in phosphate and calcium ions that provide a stable scaffold for bone regrowth. It is totally free from any animal or human content and 100% bio-absorbs.

This true regeneration leaves only host bone.



## A little history

**Human histology after 12 weeks. 50% new bone.**

### **MICROSCOPIC DESCRIPTION (12 weeks)**

"A piece of tissue composed of both compact and trabecular woven bone within moderately cellular fibroblastic tissue. Both active fibroplasia and osseous production are underway. Multiple, variably sized "cavities" containing residual refractile granular graft material are present throughout the sample.

Approximately 50% (overall) is induced woven bone. No pre-existing host lamellar bone is present. No significant inflammatory cell infiltrate is present."

Professor David Mangham, Histopathologist, University Birmingham, UK.

A microscopic image of bone tissue, showing a dense network of trabecular bone with various sized cavities containing residual graft material. The image is stained with a pinkish-purple dye.

**50% NEW BONE  
AT 12 WEEKS**

3 weeks healing post-extraction



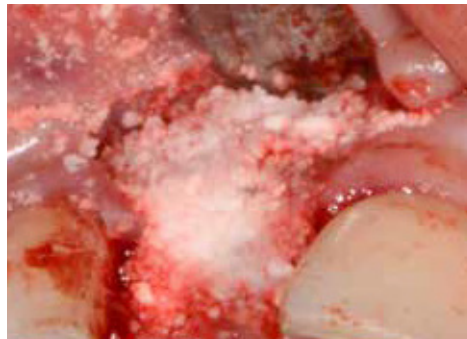
Site specific flap



Implant placement



EthOss® placement



New bone at 12 weeks



4 years post op



"I've been using EthOss® in all of my grafting procedures for over 12 months and I am delighted with the results. The flexibility of the material is great - I have successfully used it in socket grafts, sinus lifts, GBR and peri-implantitis cases, it is very versatile and user friendly."

We now have a reliable grafting material with real new bone formation. It's giving me confidence that I am doing the best for my patients."

*Lidija Jozinovic  
dr.med.dent  
Croatia*

"I've used a variety of different grafts during my career and am delighted to have discovered EthOss® - it gives consistent and predictable results, is easy to handle and turns over into new bone quickly. It has helped me speed up my treatment timetables - my patients now have excellent implant stability after only 12 weeks, and they love the idea that it is fully absorbed, with none of the ethical or religious issues that can come up with xenografts and allografts."

*Dr Nicholas Widmer  
Master of Implantology GIDE Institute / UCLA Specialist in Operative Dentistry UFSC  
Switzerland*

"I never liked working with collagen membranes, they are difficult to handle and can be a pain! EthOss® has made procedures much easier for me. Removing the need for a separate collagen membrane makes the material much easier to handle, as well as speeding up healing and new bone formation by giving the blood supply direct access to the graft site from day 1. I would recommend EthOss® to any dental implantologist!"

*Mr Ludwig Hansson  
Sweden*



- Synthetic bi-phasic paste with a simple syringe delivery system
- Provides a stable graft, sets in vivo
- Fast conversion to bone - biopsies show 50% bone at 12 weeks
- No need for additional collagen membrane
- Fully replaced by the patient's own bone
- Does not suffer wash-out in bloody sites
- Maintains long term bone volume

**GBR • peri-implantitis • periodontitis • buccal defects**  
**• sinus grafts • socket preservation**

### What is **EthOss®** made from? What is the mixture?

**EthOss®** is a new alloplastic (synthetic) biomaterial, composed of 65% Beta-Tricalcium Phosphate ( $\beta$ -TCP)  $\beta$ -Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> and 35% Calcium Sulphate (CaSO<sub>4</sub>).

### How does the material work without a separate membrane?

The Calcium Sulphate component of **EthOss®** functions as a cell occlusive binder when the material sets, providing a stable graft with tightly controlled porosity preventing soft tissue ingress into the graft site.

### When can I load my implants in cases where I have grafted with **EthOss®**?

Using the recommended Treatment Protocol<sup>1</sup>, implants can be uncovered after 12 weeks and either loaded or a healing cap fitted, subject to appropriate ISQ readings.

### How long does it take for the material to be fully absorbed?

Histology results routinely show levels of 50% new bone after 12 weeks following a procedure with **EthOss®**. The remaining material will usually resorb over the following 9-12 months, however specific timings depend on the size of the defect and the metabolism of the patient.

### How is **EthOss®** mixed / prepared?

**EthOss®** is delivered sterile in a syringe, ready for mixing with sterile saline using the recommended Treatment Protocol<sup>1</sup>. When the **EthOss®** has been mixed, it should be quickly applied to the graft site and positioned as necessary. A sterile gauze should then be held over the material for 3-5 minutes, until it has started to harden and show resistance to pressure. The site can then be closed using tension-free suturing.

### How long do I have to use the material before it will start to set?

After mixing, **EthOss®** will begin to set within approximately 1 minute. It should therefore be mixed just prior to use and immediately placed into the graft site.

### What types of defects can I use **EthOss®** in?

**EthOss®** is designed to be used mainly in localised bone defects. It can be used in standard GBR procedures, buccal augmentation, bone defects around implants, sinus lifts, socket grafting, peri-implantitis and periodontitis.



## References

1. **Protocol for Bone Augmentation with Simultaneous Early Implant Placement: A Retrospective Multicenter Clinical Study.**  
Peter Fairbairn and Minas Leventis. International Journal Of Dentistry, Volume 2015 Article ID 589135.
2. **Nuovi materiali, nuovi protocolli: un cambiamento paradigmatico nella rigenerazione ossea. Un caso clinico.**  
Peter Fairbairn & Minas Leventis. Doctor OS, Nov-Dec 2017.
3. **Augmentation osseuse a` l'aide d'un mate´riau de greffe particule´ alloplastique et implantation simultane´e : pre´sensation d'un cas clinique**  
Peter Fairbairn & Minas Leventis. JPIO Vol 35, No 4.
4. **Simplified Protocol, Successful Results.**  
Peter Fairbairn & Minas Leventis. EDI 2, 2017.
5. **Augmentation osseuse à l'aide d'un materiau de greffe particulé alloplastique et implantation simultanée: présentation d'un cas clinique.**  
Peter Fairbairn & Minas Leventis. JPIO No. 130 11.2016.
6. **Novel Graft Material with New Protocol in GBR: Use in Sinus Augmentation Using a Lateral Window.**  
Peter Fairbairn, Minas Leventis, Orestis Vasiliadis, Robert Horowitz and Monish Bhola. Poster, EAO Congress September 2016, Paris.
7. **Revised protocols.**  
Peter Fairbairn and Minas Leventis. The Dentist, October 2015.
8. **The body wants to heal.**  
Peter Fairbairn and Minas Leventis. EDI Journal 4, 2014.
9. **European Association For Osseointegration.**  
Implant Placement with Simultaneous Bone Grafting Using a Novel Alloplastic Particulate Graft Material. Peter Fairbairn, Minas Leventis, Ashish Kakar, Monish Bhola, Orestis Vasiliadis, Charles Mangham.
10. **Biological Response to  $\beta$ -Tricalcium Phosphate/Calcium Sulfate Synthetic Graft Material: An Experimental Study.**  
Leventis MD, Fairbairn P, Dontas I, et al. Implant Dent. 2014;23:37-43.
11. **Der Körper will heilen.**  
Peter Fairbairn & Minas Leventis. BDIZ EDI Konkret 01.2015.