



An Osteostimulatory Synthetic Graft Material with Exceptional Handling

## **A Formulation Like No Other**

NovaBone® Dental Putty consists of a bimodal distribution of synthetic calciumphosphosilicate (CPS) particles – more commonly known as "bioactive glass".

Polyethylene glycol and glycerin are added to the graft particles to act as binders and create the putty consistency with the CPS particles comprising 70% of the total volume.



### Novabone Dental Putty:

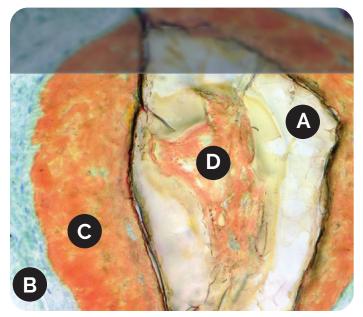
- Moldable, does not set like a cement
- Won't wash out of the defect space
- Fully resorbs being replaced by host bone
- 4-year shelf life Requires no refrigeration

### **A Bioactive Graft Material**

Most synthetic and xenograft materials are osteoconductive, serving as a scaffold for bone formation. While NovaBone Dental Putty also offers osteoconductive properties, it is a bioactive, or "Osteostimulatory" graft material.

Upon implantation, the water-soluble binders resorbs and creates a porous scaffold that allows for vascular ingrowth. The smaller CPS particles (up to 125 microns) begins to resorb and release calcium, phosphate, and silicon ions that trigger a cascade of events. Several genes are upregulated resulting in the differentiation of cells into osteoblasts. The larger CPS particles (up to 710 microns) continue this process, but take longer to resorb and impart some stability to the graft site.

# Undecalcified Histology at 4 months (Socket)\*



(Note: NovaBone particle is non-porous)

Histology: NovaBone Putty's regenerative capacity has been histologically evaluated in various clinical publications. A representative sample of histology taken from a human patient four months post-operatively demonstrates the histological interpretation of the Osteostimulation Principle.



"I have been using NovaBone putty for over 5 years as an adjunct for Partial Extraction Therapy (PET) and Crestal Sinus Grafting procedures as the cartridge system facilitates precise graft delivery and enables the hydraulic lift of the Schneiderian membrane."

Maurice A. Salama, DMD (Perio/Ortho) ATLANTA, GA

### Suitable for a Range of Clinical Applications

#### **Sinus Augmentations**



NovaBone Dental Putty can be used for lateral sinus augmentations and is particularly suitable for the crestal approach given the unique cartridge-based delivery. The Schneiderian membrane is typically elevated without incident.

### **Peri-Implant Defects**



The Putty is suitable for small to moderate-sized dehiscence and fenestration defects around dental implants, whether at the time of placement or for post placement repair. The unique cartridge-based delivery allows for precise delivery of the graft in hard-to-access defect sites or when expressing the graft between the implant body and the remaining wall of the defect.

#### **Partial And Full Extraction Sites**



NovaBone Dental Putty is an exceptional choice for filling extraction sockets. Given the complete resorption of the material and substitution with host bone, it is ideal for ridge preservation in delayed implant placement protocols.



"NovaBone provides an ideal environment for bone formation by acting as a very stable but also temporary scaffold in a variety of clinical applications, which is later absorbed and replaced with additional vital bone, maximizing tissue quality and function."

Dr. Rodrigo Neiva, DDS, MS, Chair (Periodontics) UNIV. PENNSYLVANIA, USA

NovaBone Dental Putty has been successfully used in a variety of other clinical applications to include the treatment of periodontal defects, cystic defects, and smaller localized ridge augmentations.

### A Feature Set Optimized for Clinical Efficacy & Efficiency



The sheer convenience of the NovaBone cartridge system for augmentations makes it a winner. I've used NovaBone putty for hundreds of crestal lifts over the years. Irrespective of the technique, be it an osteotome, crestal drills, piezo or Densah\* drill, the results are consistent.

Udatta Kher, MDS (Oral Surgery) PRIVATE PRACTICE, MUMBAI, INDIA

### **Superior Delivery**



NovaBone Dental Putty is available in a unidose cartridge format that is familiar to practitioners but unique to the bone graft industry. The 2.8mm curved cannula allows for precise delivery of the graft material in difficult to access defects.

It is also a highly effective delivery system for specialized indications such as the crestal approach to sinus augmentation.

### **Fully Synthetic**



As a synthetic graft material, you can be assured of consistent product quality and the elimination of any risk for disease transmission-factors which may improve patient acceptance.

### Radiopaque



The Putty material is radio-dense and hence can be differentiated from the surrounding bone on a radiograph.

### Part of a Broader Regenerative Offering

The NovaBone regenerative portfolio also includes synthetic granules and a line of collagen dental wound dressings.



The unique handling characteristics of the NovaBone Putty in combination with the cartridge delivery system allow for significant simplification of routinely used techniques in implant dentistry and significant reduction in intra-operative treatment time.

Dr. George Kotsakis, DDS, MS ASSOCIATE PROFESSOR, DEPARTMENT OF PERIODONTICS, UTHSCSA

#### **Bioactive And Fully Resorbable**



NovaBone Dental Putty creates an osteostimulatory environment in contrast to the bioinert characteristics of most other synthetics and xenografts. The clinician encounters vital bone upon re-entry versus the mortar-like composite often found with sintered materials that are rendered effectively non-resorbable.

#### Supported By An Impressive Portfolio Of Evidence-Based Research



Bioactive glass, and the NovaBone offering in particular, has been documented in the literature for several decades. There are over 50 technical publications and 30 clinical publications in peer-reviewed journals on NovaBone's CPS material.

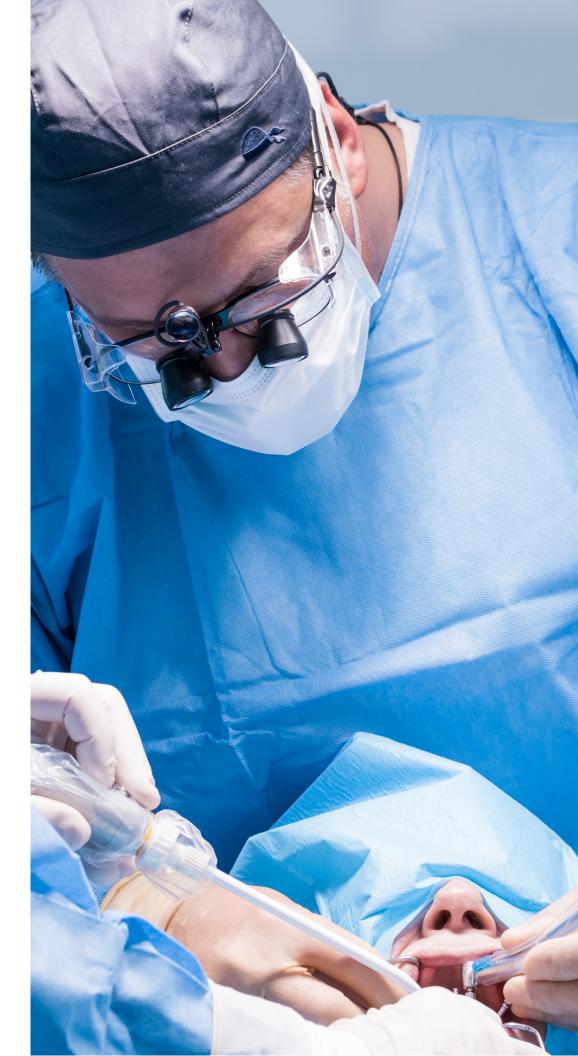
### **Configurations and Ordering Information**

NovaBone Dental Putty is available in a variety of configurations including the unique unidose cartridge and syringe options.

Cartridge System	Configuration
Cartridge Dispenser	1 Pack
0.5cc Cartridges (blue)	2 Pack
0.5cc Cartridges (blue)	4 Pack
0.5cc Cartridges (blue)	6 Pack
0.25cc Cartridges (grey)	4 Pack
Syringe(s)	Configuration
0.5cc Syringe	1 Pack
0.5cc Syringes	2 Pack
1.0cc Syringe	1 Pack

\*\*\*Not all dispensing formats are available in all countries. Please check your local distributor for sizes, part numbers and availability.\*\*\*









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Made from recycled paper.

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