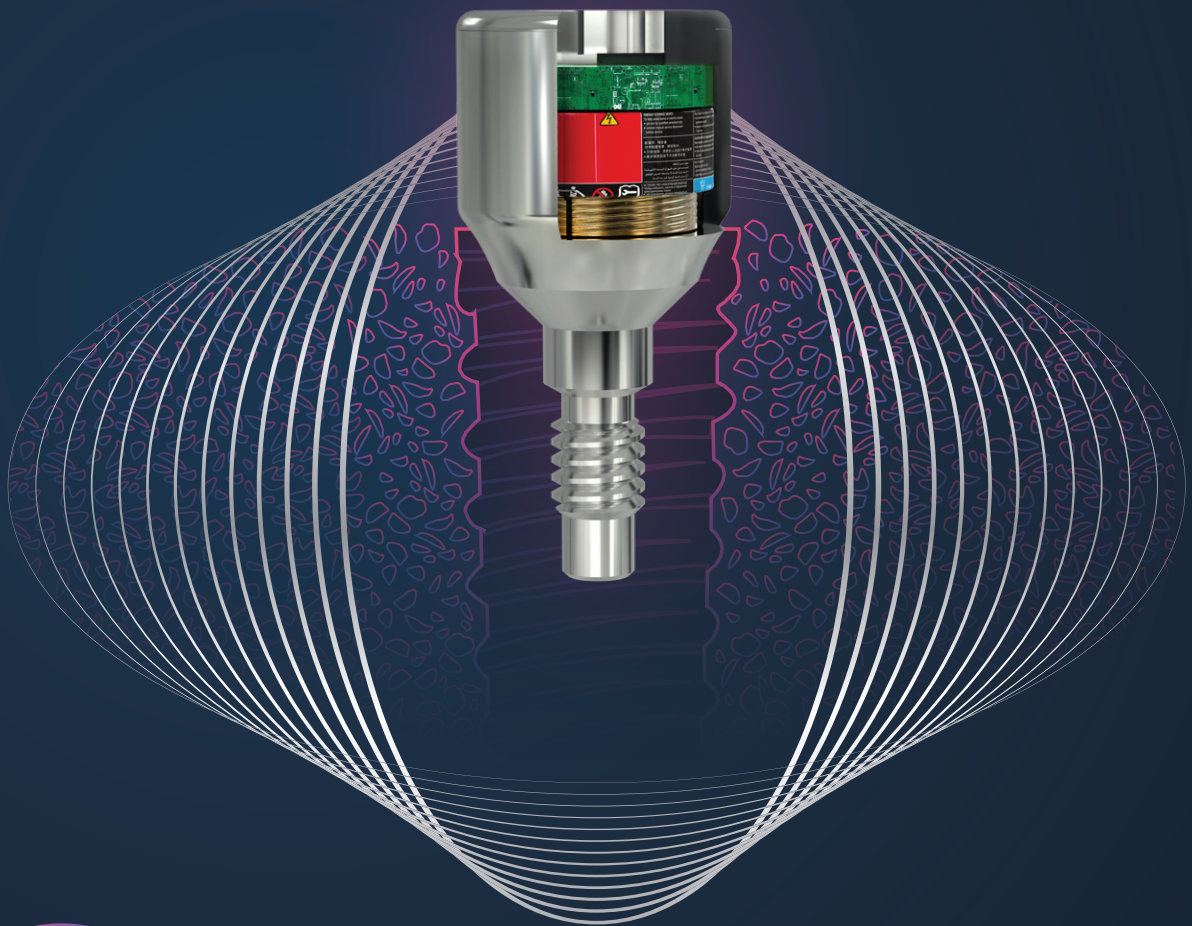




BONE GROWTH ACCELERATING DEVICE

Stimulates bone formation around dental implants



X3

Acceleration
of the healing
process

48%

Increase in
bone to implant
contact

62%

Increase in
trabecular bone
volume density



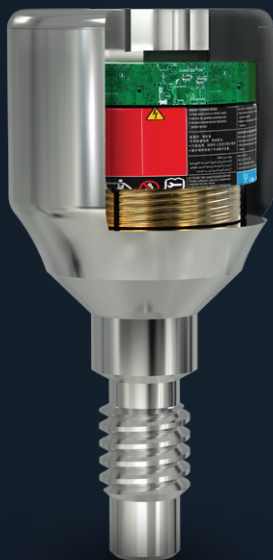
Proven success
in inflammatory
conditions

THE MAGDENT TECHNOLOGY

Magdent has revolutionized the world of dental implants, by harnessing the leading edge Pulsed Electromagnetic Fields (PEMF) orthopedics technology to stimulate bone formation and improve bone quality around dental implants.

THE BIOLOGICAL EFFECT OF PULSED ELECTROMAGNETIC FIELDS (PEMF)

Pulsed electromagnetic fields (PEMF) stimulate and enhance the creation of osteoblasts, leading to faster bone regeneration with higher density.



MEET Magdent-MED

The Magdent-MED is a miniaturized electromagnetic device shaped like a healing cap, that contains an electronic module, a battery and a coil, and produces a pulsed electromagnetic field (PEMF) for 30 days from activation time.



THE Magdent-MED ACTIVATOR

The "ACTIVATOR" is used in conjunction with the MagDent MED to activate the Magdent-MED before inserting into the implant.

CLINICAL BENEFITS OF PULSED ELECTROMAGNETIC FIELDS (PEMF) FOR PATIENTS AT RISK

Magdent-MED technology implementing Pulsed Electromagnetic Fields (PEMF) has been clinically proven to stimulate bone formation around dental implants, accelerate the healing process by 3 fold and increase bone to implant contact by 48%. Patients with poor bone quality and those prone to recurrent oral infections are at risk of implant failures. Robust evidence shows that the Magdent-MED increases bone volume density by 62%, thus making it the treatment of choice for patients with poor bone quality.

The following are only some conditions that lead to deterioration of bone quality:



SMOKERS

There are vast clinical data and observational studies that heavy smokers are predisposed to bone loss and oral inflammatory conditions which can lead to implant failure. The evidence suggests that smoking is associated with significantly increased rates of implant failure and marginal bone loss.

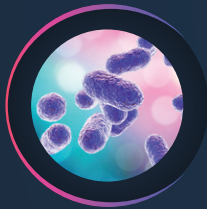
Current Evidence on Dental Implants Outcomes in Smokers and Non-Smokers: A Systematic Review and Meta-Analysis. *J Oral Implantol.* 2018 Jun 4.



DIABETIC PATIENTS

Diabetic patients are at a high risk for peri implant bone loss.

Stability and bone loss around submerged and non-submerged implants in diabetic and non-diabetic patients: a 7-year follow-up, *Braz. Oral Res.* 2018; 32:e57



PATIENTS PRONE TO ORAL INFLAMMATORY CONDITIONS

Magdent's-MED PEMF leads to enhanced bone growth even in inflammatory conditions, by increasing Mesenchymal Stem Cell (MSC) commitment to osteoblasts.

Pulsed electromagnetic fields increase osteogenetic commitment of MSCs via the mTOR pathway in TNF- α mediated inflammatory conditions: an in-vitro study, *Sci Rep.* 2018 Mar 23;8(1):5108



OSTEOPOROSIS PATIENTS

Osteoporotic patients suffer from decreased bone density and a poor bone quality.

Osseointegration in osteoporotic-like condition: A systematic review of preclinical studies. Dereka, X, Calciolari, E, *et al.* *Journal of periodontal research* 5/30/2018



ONCOLOGICAL PATIENTS

Osteopenia and osteoporosis are often long-term complications of oncological treatment, and are known as "cancer treatment-induced bone loss" (CTIBL).

Cancer treatment-induced bone loss (CTIBL): pathogenesis and clinical implications. *Cancer Treat Rev.* 2015 Nov;41(9):798-808



PATIENTS ON STEROIDS

Patients using steroids on a permanent base are at risk for calcium deficiency, osteoporosis and bone loss.

Adverse bone effects of medications used to treat non-skeletal disorders. *Osteoporosis Int.* 2017 Oct;28(10):2741-2746

HOW TO USE THE “Magdent-MED” DEVICE

1 UNPACK

Remove the device from its package, open the outer tube and extract the inner vial containing the Magdent MED



2 PLACE THE Magdent-MED INTO THE ACTIVATOR SOCKET

Once the Magdent MED is placed in the Activator socket A **RED** light will go on, signaling the MED is ready for activation



3 PRESS THE ACTIVATION BUTTON ONCE

The Activation button will beep and blink **BLUE** 4 times. The Activation button will then light up in blue for 15 seconds to indicate the Magdent-MED is ready for use.



4 SETTING THE Magdent-MED INTO THE IMPLANT

Take the Magdent-MED out of the Activator, remove the inner vial and insert the device into the implant using the supplied 1.25 hex driver



* Please note: the “Magdent-MED” DEVICE can only be used once and activated once. It is NOT reusable.

** Do not ever sterilize the MED using an Autoclave

*** Once the “Magdent-MED” is activated, the non-rechargeable battery lifespan is 30 days

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