



## What Are Mini Dental

## Implants?



The MDI System consists of a miniature titanium implant that acts like the root of your tooth and a retaining fixture that is incorporated into the base of your denture. The head of the implant is shaped like a ball and the retaining fixture acts like a socket that contains a rubber O-ring. The O-ring snaps over the ball when the denture is seated and holds the denture at a predetermined level of force. When seated, the denture gently rests on the gum tissue. The implant fixtures allow for micro-mobility while withstanding natural lifting forces.

Late in 1997, Dr. Sendax collaborated about his mini implant theory and design concepts with a colleague, Dr. Ronald A. Bulard. Dr. Bulard had previously formed a dental implant company, IMTEC Corporation, which was at the time manufacturing and marketing standard sized dental implants, abutments, and other dental products. Convinced they were on to something special, the two implantologists spent countless hours studying and refining Dr. Sendax's original creative design, resulting in a more efficient top and collar to the mini dental implants. Combining this now re-designed mini implant with Dr. Sendax's original insertion protocol resulted in a successful breakthrough. Under Dr. Bulard's direction, IMTEC Corporation began the rather complex and expensive design and manufacturing procedures which ultimately resulted in what is now offered to the dental community under the brand name IMTEC Sendax M D I (mini dental implant). The innovative system and procedure was thereafter formally introduced to the United States dental community at an implant conference in Orlando, Florida in April, 1999. It was an instant success and now represents one of the fastest growing segments of the dental product industry.

### When can Mini Dental Implants be used?

When critically needed for support purposes, and where solid bony adaptation (integration) has clearly occurred, mini implants can function as long-term supporting structures rather than as short-term or medium term devices. In fact, some have been successfully functioning in patients' jaws for several decades. In the past several years, some clinicians have been utilizing MDI's for single tooth replacements and in crown and bridge cases.

### What's the primary and most effective use for Mini Dental Implants?

The most effective use of this unique dental product is stabilization of a lower denture. There are approximately 50,000,000 people in the United States who are "edentulous" (literally meaning lacking teeth) who struggle daily with prosthetic devices. A majority suffer a great deal of discomfort as a result of loose or ill-fitting dentures. Many denture wearers simply withdraw from any type of social engagement as a result of being compelled to wear them. Moreover, it's not uncommon for family members to complain about a denture wearer's disagreeable

breath as a result of food being trapped and decaying under their denture prosthesis.

Successful placement of the Mini Dental Implant addresses and solves all of these social and practical problems. Denture patients all over the world have experienced relief from loose or ill-fitting dentures from doctors who are trained to place the MDI.

Uniquely, the MDI can be utilized to stabilize a denture in a couple of hours by a trained doctor, with the patient leaving the clinic with a stabilized prosthesis..

#### **How specifically can Mini Dental Implants help denture wearers?**

The standard insertion protocol for mini dental implants calls for four of them to be gently screwed into the front of a patient's lower jaw. This is a relatively painless procedure that can be performed by a general dentist, requiring only a mild anesthesia. The mini dental implants, which are approximately the size of wooden toothpicks, are placed about five millimeters apart in the patient's mandible. The patient's denture is then carefully adjusted by the dentist to allow it to snap onto the four mini implants. The result? A tight fitting, completely reliable system that allows a patient to speak and eat with confidence. The Mini Dental Implants are placed in about an hour's time. Because of the unique, minimally invasive procedure, the minute size of the implants, and the characteristic placement area, the typical Mini Dental Implant patient can enjoy a light meal an hour or so after having the mini implants placed. Further, a denture patient who has had his or her prosthesis stabilized with MDI can remove and replace the denture easily after a little practice, and can easily utilize good dental hygiene. All in all, the MDI is quite satisfying.

#### **I'm somewhat aware of the tremendous forces the human jaw usually endures during normal chewing of food. How can these tiny Mini Dental Implants withstand that?**



It's true that what the dental profession calls occlusal forces create dynamic pressures on the human jaw. Our jaws are marvelously designed to adequately withstand those forces. It's also true that mankind has been struggling for centuries to come up with some type of metal or metallic element that can efficiently withstand those forces. Most have been outright failures. However, approximately twenty-five years ago some doctors around the world began experimenting with titanium as a potential dental medium. Titanium is an extremely strong metal used in the

construction of aircraft and aircraft engines. The metal, in its commercial form, is incredibly strong and durable. The Sendax Mini Dental Implants takes that metallurgical concept to the next level by adapting an industry approved alloy of titanium. The result is the strongest metal on earth, now commonly referred to as titanium alloy. In fact, extensive tests conducted several years ago by the University of Alabama-Birmingham School of Orthopedics at Dr. Sendax's behest revealed that the particular titanium alloy implants used in the IMTEC Sendax Mini Dental Implants are 64% stronger than ones constructed of commercially pure titanium. The bottom line of this discussion area is simple: If a denture patient has sufficient bone mass to create a rock hard placement of the tiny implant, which an experienced dentist can usually determine by an initial examination, the mini dental implants will generally withstand normal chewing forces just like natural teeth. Fractures are extremely rare, but as the case with a person's normal teeth, can certainly occur.