Could chewing gum prevent implant failure in the future?

By Dental Tribune International

About 6 to 15 percent of patients suffer from peri-implantitis, inflammation that destroys soft and hard tissue surrounding the implant after placement. Researchers from Germany have announced they are planning to develop a chewing gum that releases a bitter flavor in the presence of peri-implantitis-specific enzymes. With their invention, they hope to accelerate diagnosis of the disease.

It is known that the concentration of matrix metalloproteinase-8, an enzyme that is also responsible for periodontitis, increases significantly when inflammation around the dental implant arises. Prof. Lorenz Meinel from the Institute of Pharmacy and Food Chemistry at the University of Würzburg explained that this increase could be identified through a special chewing gum using a small peptide chain that is bound to a bitter-tasting compound.

Once enzyme concentrations in a patient’s saliva exceed a certain level owing to complications with the implant, the peptide chain will snap, releasing the bitter compound.

In the future, special chewing gum could be part of postoperative care, in addition to routine check-ups. Patients would have to contact their dentist upon recognizing the bitter taste.

In addition to the development of the chewing gum, the researchers are considering developing a coating that uses the peptide chain system and can be applied to the implant directly.

The project will be carried out in collaboration with Swiss dental implant manufacturer Thommen Medical and various other European companies and scientific institutions. The research has received funding of €1 million for two years from the European Union.

German researchers aim to develop special chewing gum

By Dental Tribune International

Dr. Peter M. Loomer has been appointed chairman of NYU’s Ashman Department of Periodontology and Implant Dentistry.

Dr. Loomer named perio chair at NYUCD

Peter M. Loomer, DDS, PhD, an internationally recognized authority in the fields of periodontology and implant dentistry, has been appointed chairman of the Ashman Department of Periodontology and Implant Dentistry at the NYU College of Dentistry. Loomer will continue to serve as director of global health for oral health sciences at the NYU Global Institute of Public Health.

“Dr. Loomer’s passion and dedication to global oral health has led him to promote oral health research, education and patient care initiatives at the national and international levels,” said Charles N. Bertolami, DDS, DMDSc, Herman Robert Fox Dean and professor of oral and maxillofacial surgery at NYU. “As chairman, he will be responsible for shaping the future of periodontal and implant education at both the pre- and postdoctoral levels. Please join me in congratulating Dr. Loomer and wishing him every success in his new position.”

Since June 2013, Loomer has served as director and clinical professor of periodontology as well as director of global health for oral health sciences at the NYU Global Institute of Public Health. Prior to joining NYUCD, he was professor of clinical affairs at the UCSF School of Dentistry, where he served with distinction as director of predoctoral periodontology, vice-chair of the division of periodontol-

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A board-certified periodontist and prolific author, Loomer has served in many roles in organized dentistry, including chair and councilor of the American Dental Education Association (ADEA). Section on Periodontics, president of the American Association for Dental Research (AADR) San Francisco Division, the American Academy of Periodontology Patient Benefits and Advocacy and Education committees, the Joint Commission on National Dental Board Examinations Test Construction Committee and the Commission on Dental Accreditation. His research has been funded by the NIH and the Gates Foundation.

About New York University College of Dentistry
New York University College of Dentistry (NYUCD) is the third oldest and the largest dental school in the United States, educating more than 8 percent of all dentists. NYUCD has a significant global reach and provides a level of national and international diversity among its students that is unmatched by any other dental school, the school’s administration asserts. For more information, please visit www.nyu.edu/dental.

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Study finds that shorter waiting time between dental procedures is adequate

Two surgeries are frequently required for tooth replacement with dental implants; however, clinicians must allow for adequate healing time between the procedures. Most patients want to minimize the overall recovery time and thus desire the surgeries be done close together. A study in the Journal of Oral Implantology looks specifically at healing times between the two dental procedures involving tooth replacement.

With tooth loss, the jawbone can shrink, making it impossible to replace the missing teeth with dental implants without risk of nerve or sinus damage. An additional surgery may be required to assure that adequate jawbone height and width are available for implant placement.

The study looks at 14 patients who underwent two procedures involving tooth replacement. In the first procedure, patients received a bone substitute, composed from nanocrystalline hydroxyapatite, which was grafted into the patient’s jaw. This synthetic material provided scaffolding for new bone growth, expanding into patients’ upper jawbone. Half of the patients then waited three months while the other half waited six months before undergoing the second procedure, placement of the dental implant(s).

The study found similar results among patients three years after the dental implants; whether patients waited three or six months between procedures. The 14 patients collectively received 24 implants in the upper jaw, and only one patient lost an implant. No implants were loose and only a few showed signs of plaque or changes to soft tissue.

The authors conclude that synthetic bone seems to need only three months to become secure enough for dental implants to be placed successfully in the jaw. The additional three months between surgical procedures had no significant long-term effect among the studied patients.


About Journal of Oral Implantology
The Journal of Oral Implantology is the official publication of the American Academy of Implant Dentistry. It is dedicated to providing valuable information to general dentists, oral surgeons, periodontists, periodontics, scientists, clinicians, laboratory owners and technicians, manufacturers and educators. The JOI distinguishes itself as the first and oldest journal in the world devoted exclusively to implant dentistry. For more information about the journal or society, visit www.joionline.org.