



Dan Hubig

Puffing and Snoozing Top the List of Lifestyle Factors That Impact Oral Health

A study has identified that certain lifestyle habits have an impact on periodontal health. Among these factors are mental stress, exercise and nutrition, but the top two are smoking and sleeping.

A study in the spring issue of the *Journal of Periodontology* followed a group of 219 factory workers in Japan from 1999 to 2003 in an effort to evaluate the effect of different lifestyle factors on the progression of periodontal diseases. Each worker was evaluated on a list of the following lifestyle factors: alcohol consumption, eating breakfast, hours of sleep, hours worked, mental stress, nutritional balance, physical exercise, and tobacco use. At the top of these factors that impacted the progression of periodontal disease was smoking, trailed by hours of sleep.

More than 41 percent of study partici-

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Helping Patients Give Overbrushing the Brush Off

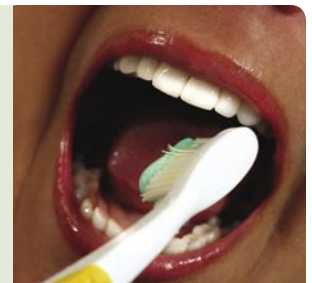
There is something to the adage “too much of a good thing.” It even applies to dental care.

In an article in the *Texas Dental Journal*, Drs. Hiroyasu Endo, Terry Rees, William Hallmon, Yoshiharu Kono, and Takao Kato, reported on a number of case studies showing that “excessive oral hygiene practices” can inflict serious gingival injuries.

One of the cases presented was of a 54-year-old woman with a one-month history of gingival problems, including bleeding and lesions. The woman had told her dentist that, fearful of losing her teeth, she brushed with a hard-bristle toothbrush for more than 30 minutes three times a day. Her dentist instructed her to use a soft-bristle brush and limit her brushing to two minutes each time. Two weeks later, the patient reported she was no longer in pain, and the dentist noted that all ulcers and other problems had disappeared.

In another case, a woman who reported similar personal hygiene habits also stated she had sore gums. After receiving brushing tips from her dentist, the patient reported a week later that her gingival pain had disappeared completely.

The authors concluded by warning that excessive brushing and other bad habits could be a sign of emotional disturbance.



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Museum Features Cutting-edge Science That Could Treat Disease and Grow New Teeth

For thousands of years humankind has sought to replace lost teeth. Even ancient Egyptians used gold wire to attach a donor tooth to their own teeth. Now, imagine replacing a missing tooth with a new one grown from one's own cells? What's more, imagining may not be too far from becoming an actuality.

At the Samuel D. Harris National Museum of Dentistry, the recently opened exhibit "Bioengineering: Making a New You" shows how researchers have taken the first steps to grow new teeth from adult stem cells. One also can discover how this emerging science works, what it means for the future of dentistry, and what types of careers could help make it a reality. The cutting-edge dental research that is being

done could revolutionize the way a lost or diseased tooth is treated, but could also offer the key to diagnosing and treating systemic disease.

Engaging displays and hands-on experiments reveal the science behind the breakthroughs, "Bioengineering: Making a New You," which opened June 16, traces the history of tooth replacement from

the ancient Egyptians to today; explores how researchers are using adult stem cells (found in the pulp of baby teeth and adult teeth) to begin growing natural teeth replacements; and reveals how genes inserted into the salivary glands could be used to treat systemic disorders like diabetes.

"Bioengineering: Making a New You' showcases innovative research that could ultimately change the face of oral health and the treatment of systemic disease," said Rosemary Fetter, NMD executive director. "The National Museum of Dentistry is proud to play a part in educating the public about these important advances in dentistry that will make a significant



← Stem cells obtained from pig periodontal ligament form a single colony cluster. A stimulus has caused these cells to organize — an example of the first step toward growing a new tooth.

impact on our lives in years to come."

The completion of the Human Genome Project has enabled scientists to unlock the secrets of the genetic code, opening the door to unprecedented breakthroughs in science. Researchers already have taken the first steps to separately grow the crowns and roots of teeth from adult stem cells. They are working on growing a complete tooth with the correct shape and size. Researchers also are studying ways to treat oral and systemic diseases using genes. Salivary glands are being studied as an ideal injection site for gene therapeutics.

"Bioengineering: Making a New You" is the latest installment of "Your Spitting Image" series, the first museum exhibition to focus on the cutting-edge research that is changing the face of dentistry. Developed by The Dr. Samuel D. Harris National Museum of Dentistry, the interactive three-part exhibition includes "Saliva: A Remarkable Fluid"; "Forensics: Solving Mysteries"; and the current "Bioengineering: Making a New You." The series explores how emerging science will affect dentistry and overall well-being in the future.



↑ Mankind has sought to replace missing teeth for thousands of years. Ancient Egyptians had access to "specialists of the teeth"

Some had their teeth replaced by using gold wire to attach the crown from a donor tooth to their own teeth.



↑ Careers in cellular and molecular biology, chemistry, genetics engineering, and dentistry will help help make bionengineered teeth a reality.

Perio Therapy May Help Baby Arrive Right on Time

According to a study published recently in the *Journal of Periodontology*, periodontal therapy may significantly reduce the risk of delivering a preterm, low birth weight baby for women with the oral disease.

The study looked at 328 pregnant women with periodontal disease and 122 periodontally healthy women. Periodontal treatment was performed during the second trimester of pregnancy on 266 of the women with periodontal disease. Sixty-two women dropped out of treatment. Postpartum follow-up on all 450 subjects showed that 79 percent of the women with untreated periodontal disease had delivered a preterm, low birth weight baby compared to only 7.5 percent of the periodontally treated women and 4.1 percent of the healthy women.

“Our study showed that performing periodontal therapy on pregnant women who have periodontal disease may reduce

the risk of preterm delivery to equal that of periodontally healthy women,” said study author Catia M. Gazolla, DDS. “These are important findings that we hope all pregnant women will take to their dental professionals when discussing their periodontal health.”

“These findings are interesting, as they come on the heels of another study appearing in the May issue of the *JOP* that showed the effects of high levels of periodontal bacteria during pregnancy on increased risk for preterm delivery,” said Preston D. Miller, Jr., DDS, president of the American Academy of Periodontology. “These studies and others continue to strengthen the idea that women should consider a periodontal evaluation as part of their prenatal care.



Some Straightforward Steps in Preparing to Sell

Preparing a dental practice for sale involves a number of phases, said financial expert Timothy Brown in an issue of *Ontario Dentist*. Brown said there are five main steps one should consider before attempting to successfully sell a practice:

- Confirm your premise lease renewal. Although most leases contain an option to renew, a tenant must confirm the presence of such an option before selling or risk a lot of headaches later on. Most practice buyers today demand the right to remain in the existing premises for a minimum of seven or eight years.
- Prepare your financial records. Buyers want to understand the nature of a practice and may want to see a procedure analysis to determine if their skill set matches that of the owner vis-à-vis the financial software used in the practice.
- Ensure that your practice is protected against employee fraud. It might be wise to hire a professional fraud investigator to go over your books and computer data to shore up your practice. A clean bill of health in this area is nice to have prior to selling.
- Review and update contracts and agreements. Purchasers demand accurate details of the contracts you have in place. Ask your associates, partners, and landlord for copies of your contracts and make sure they are dated and signed.
- Consult with your accountant about incorporation. There might be substantial tax benefits to incorporating prior to a sale.



Be Proactive Before Catastrophe Strikes

Preparation is key in helping a dental practice survive a natural or man-made disaster said property-loss expert Wes Baldwin in an issue of *NYSDA News*, the newsletter of the New York State Dental Association.

And, Baldwin wrote, the time to plan for disaster is now because one can't file a claim for what one cannot prove one owned. It is essential one complete an inventory, and document every aspect of your practice, including its contents. Other considerations, according to Baldwin:

- If you own the building in which your practice is located, keep photos of the exterior on file.
- Photograph the interior of your

practice, including all of its equipment and supplies. Don't forget storage areas.

- Keep a record of serial numbers and replacement value for all your equipment.
- Make copies of all contracts and financial records in order to determine losses caused by a disaster.
- Back up patient records, X-rays, and computer files.

All of these materials, along with insurance policies, equipment manuals, warranties, and deeds should be secured off site.

Baldwin also advised hiring a public insurance adjuster after disaster strikes. Paid a percentage of the final settlement from the insurance company, a public adjuster tends to be less biased in arriving at a final settlement.

Honors

Kevin D. Anderson, DDS, MAGD, of San Diego, was recently honored with the 2007 Distinguished Service Award from the Academy of General Dentistry. As former treasurer, chair of Budget & Finance, as well as the Investment Committee, Anderson provided valuable input in the establishment of goals and strategic direction to help grow and establish financial stability for the AGD. In two years he grew the reserves of the Academy from \$2.2 million to more than \$6.5 million.

Anderson retired from the active practice of dentistry five years ago and recently launched a private equity partnership fund open to accredited investors of which many dentists are partners.

This year's winner of the Norton M. Ross Award for Excellence in Clinical Research is **John D. B. Featherstone, MSc, PhD**, professor and interim Dean of the University of California, San Francisco, School of Dentistry, Preventive and



Kevin D. Anderson, DDS, MAGD



John B. Featherstone, MSc, PhD



Arthur A. Dugoni, DDS, MDS

Restorative Dental Sciences.

The award recognized him for his "perseverance in investigating the field of cariology," as well as his groundbreaking research that "has significantly advanced scientific knowledge of dental caries and caries-inhibitory mechanisms, and changed the way we treat caries and control the underlying infectious disease," according to an ADA press release.

The Program Advisory Committee of the Edward B. Shils Entrepreneurial Education Fund presented its 2007 Shils Award to **Arthur A. Dugoni, DDS, MDS**, dean emeritus of University of the Pacific, Arthur A. Dugoni School

of Dentistry. Dugoni was honored for his outstanding leadership and exemplary service to the dental community, dental education, and public oral health.

Dugoni is currently president of the ADA Foundation and has served as president of the ADA, the American Association of Dental Schools, the American Board of Orthodontics, and the California Dental Association. While he concluded his deanship at the Arthur A. Dugoni School of Dentistry in 2006, he continues to be involved with the school and the university as dean emeritus, professor of orthodontics, and senior executive for development.

UPCOMING MEETINGS

2007

Sept. 27-30 American Dental Association 148th Annual Session, San Francisco, ada.org.

Nov. 27-Dec. 1 American Academy of Oral and Maxillofacial Radiology 58th Annual Session, Chicago, aaomr.org.

2008

May 1-4 CDA Spring Scientific Session, Anaheim, 800-CDA-SMILE (232-7645), cda.org.

Sept. 12-14 CDA Fall Scientific Session, San Francisco, 800-CDA-SMILE (232-7645), cda.org.

Oct. 16-19 American Dental Association 149th Annual Session, San Antonio, Texas, ada.org.

To have an event included on this list of nonprofit association continuing education meetings, please send the information to Upcoming Meetings, CDA Journal, 1201 K St., 16th Floor, Sacramento, CA 95814 or fax the information to 916-554-5962.

“Entrepreneurship is living a few years of your life like most people won’t, so that you can spend the rest of your life like most people can’t.”

ASPIRING BUSINESS OWNER,
AS QUOTED IN
ENTREPRENEUR MAGAZINE

ADA Publication Reviews Impression Materials, High-speed Handpieces

Working time for elastomeric impression materials can drop 50 percent or more once syringed around the teeth and reach mouth temperature, according to the summer issue of the *ADA Professional Product Review*.

“We knew that the reaction time was shorter at higher temperatures, but we were surprised some materials retained only 25 percent of their working time at 35-degrees Celsius compared with working time at 23 degrees,” says David Sarrett, DMD, editor of *PPR*. “For some materials, the working time at 35-degrees Celsius was less than 10 seconds.”

In addition to working time, the *PPR* reported on elastic recovery, stiffness, tear strength, and other common properties. Brands of impression materials tested for this review were Affinis, Aquasil Ultra Smart Wetting, Correct Plus, Examix NDS, Flexitime, Genie Ultra Hydrophilic, Impregum Penta Soft Quick Step, Imprint 3, Take 1, and VP Mix.

PPR, which was packaged with the July issue of *The Journal of the American Dental Association*, also looked at high-speed handpieces, both air turbine and electric.

This edition also featured performance

evaluations of eight air turbine handpieces and compared traits of those handpieces with their electric counterparts. Handpiece manufacturers whose products were reviewed were Bien-Air, Brasseler, Dental-EZ Group, Dentsply, KaVo, and Sirona Dental Systems.

PPR is a quarterly publication sent to ADA dentists along with their issue of *The Journal of the American Dental Association*. The newsletter is free to ADA members and available by subscription to nonmembers. For subscription information, go to www.ada.org or call 312-440-7735.



Volunteers Sought for ADA's New Forensic Standards Project

The American Dental Association Standards Committee on Dental Informatics is seeking volunteers for its recently approved work project on a standard for dental forensics.

The proposed ADA Specification No. 1058 for Antemortem Forensic Dental Data Set will recommend forensic data standards necessary to adequately serve the dental forensic odontology community.

No guidelines currently exist for defining a minimal dental data set or other technical guidelines concerning dental forensic information. This project will meet the need for a forensic dental standard of data that will aid in the determination of the identity of an unknown person.

For information about participating in the ADA standards committee working group that will develop the standard, contact Paul Bralower bralowerp@ada.org or 800-587-4129.

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PRESTON D. MILLER, JR., DDS



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pants who showed periodontal disease progression from 1999 to 2003 were smokers. Additionally, lack of sleep was identified as a significant lifestyle factor that may play a role in the progression of periodontal disease. The participants who snoozed seven to eight hours exhibited less periodontal disease progression than those who received six hours or less of sleep. Daily alcohol consumption and high stress levels also demonstrated significant impacts on periodontal disease progression.

“Our findings are in line with other studies that have identified smoking as a strong lifestyle factor affecting oral health,” said study author Muneo Tanaka, DDS. “However, studies that have looked at hours of sleep as an independent factor affect-

ing periodontal health are limited. From this study, we can speculate that shortage of sleep can impair the body’s immune response, which may lead to the progression of diseases such as periodontal disease.”

“This study points out to patients that there are lifestyle factors other than brushing and flossing that may affect their oral health,” added Preston D. Miller, Jr., DDS, president of the American Academy of Periodontology. “Simple lifestyle changes, such as getting more sleep, may help patients improve or protect their oral health,” said Miller. “It is also important to keep these in mind as the body of evidence linking oral disease with systemic diseases continues to grow because ultimately these lifestyle factors might impact a patient’s overall health.”