

LATEST NEWS

FUTURE DENTISTRY: NEW TOOTH GROWTH

While some people have a genetic mutation and grow three sets of teeth, for the rest of the population there is the persistent fear of having to lose your teeth as one ages. Have we progressed much in the last century? As long as we continue to pull teeth and/or place dentures on older people whether they are anchored to the jaw or gums, the answer is no. We live in a society that intentionally has enforced planned obsolescence. When a dentist patches up your cavity, why does it fall off in a year or two? Did you know that the Aztecs were very advanced in dentistry for their time? They had resins that never came off any cavity. Scientists have examined skeletons and have found that their resins lasted a lifetime!

There is hope for some change in the XXI century although for the older set, they will never experience the new changes. In the U.S. there is an excessive consumption of sugar that leads to numerous health issues above and beyond tooth decay. The difference between teenagers of the first half of the XX century and the second is that the latter were protected by fluoridation. By 1960 toothlessness had declined by 60%. Now some researchers are trying to achieve the ability to regenerate teeth in adults. To date, it has been the practice to pull out wisdom teeth since they have essentially no function. If the new shift will become a reality, you may want to keep your wisdom teeth since they contain the stem cells that will be required to regenerate teeth, according to The National Institute of Health. There is no reason to loose teeth according to Pamela Robey,

chief of the Craniofacial and Skeletal Diseases Branch at the National Institute of Dental and Craniofacial Research. The reasoning behind this is good health care and proper habits. It is thought that with proper gum care, your teeth will be able to stay intact since gum disease brings about the loosening of teeth. Dentures, according to Mary MacDougall, director of the Oral Institute of Oral Health Research at the University of Alabama, will be a relic of the past, like George Washington's teeth. Apropos, Washington never had wooden teeth, although he was a deplorable health case. He had some dentures made of animal and human teeth that were comprised largely incisors intended moreover for appearance or portraits.

Loosing one's teeth archetypically in dreams means a fear of castration or a complete failure in life. Symbolically, it means to become vulnerable. As it become rare to loose teeth, dreams of losing them will become more nightmarish. But regenerating teeth is no less complicated than reconstructing a whole heart, says Sontao Shi of USC who heads a team of working on creating such a tooth. Not only do you have to create smart tissue (nerves), strong tissue (ligaments), and soft tissue (pulp), but you have to build enamel, the hardest structural element in the body. Finally, you have to make the entire arrangement last a lifetime in the stew of acids and bacteria that is in your mouth. The first whole tooth may not be grown until another five to ten years. One the strategies are to create the root. More in line in terms of time is the treatment of periodontal disease with regeneration.

Still, poverty makes a difference, as do health education, access to quality dental care and culture. In West Virginia, in the Appalachian highlands, 40% of adults over 65 are toothless. That is more than twice the national average. Kentucky is second with 38.9 % and Tennessee third with 34.9%. Lifestyle is also responsible for this. What you eat and lack of exercise can put you at risk for a number of health problems. Where there is poverty, obesity and smoking is very, very high. The fat intake is high with cheap, high-calorie fast food abundant. Conversely, they rank very low in nutritional markers like vegetable and fruits. Ironically, Britons are worse off than West Virginia, reaching 46% toothlessness over 65 according to the World Heath Organization. In Europe, this is exceeded only by Albania, Bulgaria and Bosnia-Herzegovina.

The lesson is to re-educate yourself in terms of health. Avoid candy which is largely sugar with artificial flavorings, junk food which is high caloric and loaded with fat. Avoid all fried foods—request baked natural white meat if possible if you are not a vegetarian. Most of the food chain is contaminated with all manner of unnatural chemicals that are harmful. Begin to read labels. The first ingredient listed dominates the product. If it is sugar or corn syrup, put it back. Shop where natural/organic foods are sold. You may pay more but you will come out ahead, health wise in the long run. Most important is taking care of your teeth. Flossing is wise but

many people do not make the time to properly clean debris between your teeth. You may want to get a high powered irrigation machine like the dentist uses to thoroughly clean between your teeth while massaging your gums as well. Rather than using only water, mix in Listerine and antiplaque solution. This will fight off periodontal problems in the future. Finally, be consistent. Take care of your teeth after every meal. The longer food particles stay in your gums and teeth, the more at risk you become. If your children loose their baby teeth and /or wisdom teeth, keep them. Ask about liquid Nitrogen storage for future tooth regeneration.

Happy and Insightful Reading,

Arnoldo Carlos Vento, PhD Executive Officer