

# The INSIDE Bite

Created for the Patients of Mark Fried, D.M.D. — Spring 2019

## Research Links Gum Disease to Alzheimer's Disease

I feel like every newsletter I'm writing another article about another illness linked to gum disease. The current list includes diabetes, heart disease, stroke, premature births and low birth-weight babies. New research is adding one more to that – Alzheimer's disease.

A study published in the journal *Science Advances* found a key pathogen associated with chronic gum disease in the brains of people with Alzheimer's disease. The authors say these studies, along with additional testing in mice provide solid evidence of a link between the two diseases and may offer a potential new way to treat

Alzheimer's.

The team tested drugs in mice aimed at clearing the harmful bacteria (*porphyromonas gingivalis*) and were able to reduce the numbers of bacteria also blocking toxic proteins it produces and halting degeneration of the mice's brains.

This is not the first study to show a relationship between gum disease and Alzheimer's. In 2017 a study in Taiwan found that people with chronic gum disease for more than 10 years had a 70% increased risk for developing Alzheimer's.

Another small study published in 2016 found gum disease was associated with a six-fold increase in the

rate of cognitive decline in people with mild to moderate dementia.

It should be noted that these studies don't show causation, only correlation and that more research is needed to clarify the exact relationship. There are many factors that go into the risk of developing dementia.

In other words, it's unknown whether gum disease increases the risk of Alzheimer's, or if people with dementia have an increased risk of gum disease because of poor oral care.

The Alzheimer's Association has a campaign called "Ten Ways to Love Your Brain" to help people decrease their risk.

## Are We Comparing Apples to Apples?

It is said you get what you pay for. Most of us generally agree, however, there's always a part of us looking for a bargain, or at least the best value in any situation. Dentistry, like many industries, has a wide range of service models. You could compare it to restaurants or department stores in that there are less expensive providers, medium cost

providers and more expensive providers. Unlike restaurants or department stores, however, there is no third party influencing your choice of what model to use. You can shop at Walmart and Nordstrom the same day if you want, eat a burger at McDonalds for lunch and have another at the Capital Grille for dinner. In those instances, you're generally aware of the relationship between cost and quality. You're not expecting the \$5 burger at McDonalds to be the same as the \$15 burger at the

Capital Grille, and rightly so. If that were the case few would buy the \$15 burger. In dentistry there are similar forces at work, they're just harder to see.

First, you have dental insurance, which is a benefit delivered at whatever level the employer chooses to purchase. Employers can spend more providing you with better benefits and fewer restrictions, or they can spend less. As a dentist, I legally have to provide the same quality of service at the same price for everyone that

comes through the door, regardless of whether they have good, bad or any insurance at all. I have chosen to try and provide the best care I can while still trying to keep costs reasonable. We are far from both the most and least expensive office in town, but try and provide care the way we would to our friends and family.

Recently there's been a trend for insurance companies to push employers towards less expensive plans. Some of these have

**Continued on page 3**

# Studies Reaffirm Safety of Fluoridation

Researchers have found no link between fluoride exposure and adverse health effects in a study published in *Neurotoxicity Research*, the official journal of the Neurotoxicity Society, and announced last April by the National Toxicology Program (NTP).

The study, sponsored by the NTP, headquartered at the National Institute of Environmental Health Sciences of the National Institutes of Health, reported no observed fluoride exposure-related differences in motor, sensory or learning and memory performance in rats. Researchers also found no exposure-related pathology in the heart, liver, kidney, and testes.

The study comes after a 2016 NTP systematic review that found a “low-to-moderate level of evidence” that supported adverse effects on learning and memory in animals exposed to fluoride in food and water. However, many of the studies examined as part of the review included exposure to fluoride at levels higher than the recommended level for community water fluoridation.

For the study, rats were exposed to fluoride in their diets and drinking water designed to simulate human fluoride exposure. Fluoride in drinking water was examined at three levels with the highest being equal to human consumption of 4 mg/L (ppm) which is the EPA’s maximum level for naturally occurring fluoride in water and more than five times the amount recommended for community water fluoridation (0.7 mg/L).

“The ADA supports ongoing research on the safety and effectiveness of community water fluoridation,” said Dr. Bonita Neighbors, chair of the ADA National Fluoridation Advisory Committee. “The study by respected researchers at NTP strengthens the scientific base demonstrating the safety of water fluoridation.”

The ADA endorses community water fluoridation as a safe, beneficial, cost-effective and socially equitable public health measure for preventing dental caries (cavities) in children and adults.

## New Whitening Products

Colgate has just come out with a new teeth-whitening system which allows us to provide excellent whitening results at less than half the cost we previously could. The materials rely on a light-activated bleaching gel in a universally adaptable delivery tray. I’ve tried it myself with good results.

Give us a call if you’d like more details, or would like to schedule a treatment.



## Dental Tidbits

### Tooth Fairy Draws Purse Strings Tighter

#### Gifts Dip 21% In 2 Years

The tooth fairy is getting stingier.

Kids cashed in at an average of \$3.70 per lost tooth last year, down 43 cents from 2017 according to Delta Dental Plans Association, one of the nation’s biggest dental insurance collectives.

It’s the second straight year the tooth fairy has played Scrooge in the annual survey, which Delta Dental has conducted for 21 years. As recently as 2016, parents — um, the tooth fairy — paid out \$4.66 per tooth. That’s a drop of almost 21 percent in two years.

Other findings from the survey:

Kids made more bank in the West, averaging \$4.19 a tooth, compared to \$3.91 in the South, \$3.75 in the Northeast and \$2.97 in the Midwest. All were lower than they were the previous year.

Almost half of kids, 48 percent, choose to save their earnings rather than to spend them.

30 percent of kids go to bed earlier than usual when they’re stashing newly detached teeth under their pillows.



Dr. Le joined the staff during the fall of 2018 and is available for new patients.

## Annie Le, DMD Joins the Staff

Drs. Fried, Werman and Shih are very pleased to welcome another dentist to the office!

Dr. Annie Le is a compassionate and comprehensive dentist. She is detail oriented and strives to provide the highest level of care for her patients.

She is originally from Vietnam and grew up right here in Massachusetts. Dr. Le attended Massachusetts College of Pharmacy and Health Sciences where she earned her Bachelor of Science in Dental Hygiene in three years. She received her DMD degree from Tufts University School of Dental Medicine and was awarded with a Special Care in Dentistry Award for Outstanding Performances and the Meade Scholarship.

While at Tufts, Dr. Le gained extensive knowledge in not only general dentistry practices, but

expanded her skillset in oral surgery, periodontology and treating special-needs patients.

Dr. Le has a strong passion for community service locally as well as abroad. She was involved in Dentists for Humanity and traveled to Haiti to provide dental care and hopes to return in the future. She participated in the annual Special Needs Olympics and Give Kids a Smile, a program at Tufts, providing chair-side dental screenings for families.

She enjoys working with patients of all ages and comfort levels, especially helping kids feel at ease throughout their treatment.

In her free time, Dr. Le enjoys baking, hiking, skiing and arranging flowers.

Dr. Le is a member of the American Dental Association and the Massachusetts Dental Society.

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## Be Sure You Compare Apples-to-Apples When Selecting Dental Care

### Continued from page 1

significant incentives for you to go to dentists who are “in network.” It’s kind of like saying “if you want us to cover in full you need to shop at Target.” To become “in network,” dentists have to accept a significantly lower fee schedule than their own. I sometimes get asked why we haven’t joined a particular plan and generally the answer is that their reimbursement levels are below operating costs. It’s basically as if someone told TGI Fridays they could only sell a burger at McDonald’s prices. They can cut costs just so much before quality suffers.

How does this show up in your dental care? First of all, consider time allowed per procedure. Our hygienists get to plan a full hour for each adult patient. If I were in a discounted network, we’d have to cut that shorter to avoid operating at a loss- perhaps 50-, 45- or even 30-minute appointments.

Second is material selection. There are generic dental materials

out there (we don’t use any). While serviceable initially, they aren’t expected to last as long or perform as well overall. We also use a lot of extra materials that enhance what we’re doing and the quality of the end result. If I participated in discounted plans there would be no room in the budget to use better materials or extras.

Finally, the difference is in approach to situations. If I were operating in the discounted environment, there would be pressure to upsell situations: recommend treatment that wasn’t absolutely necessary just to cover expenses. Thankfully, we don’t need to do that. In fact, we tend to go in the other direction, giving you all the choices (with pros, cons and costs involved) and happily taking care of your needs in whatever manner you prefer.

It’s common for people to come in to us with treatment plans from other offices that I look at and scratch my head a bit as they include a lot of work my 34 years of

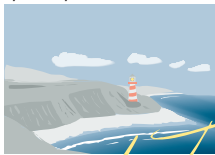
experience tells me isn’t absolutely needed. Sometimes the places that look cheap to begin with end up costing people more in unnecessary work.

I understand that when given a choice that initially looks like you will have little or no out of pocket costs, it’s very tempting to follow that path. All I can say is that there’s a reason only 5-10% of dentists sign up for the discounted plans. Most of us are trying to provide a good experience and end result. Some plans make that impossible to do.

That said, employers often switch plans every few years. Feedback from employees is definitely a factor. Also, we have the ability to work with the discounted plans and provide some middle ground. In many cases, there isn’t much difference between reimbursement when seeing an “in network” and an “out of network” dentist.

Before assuming you can only see someone in your network let us call and compare for you!





## New Guidelines on Antibiotics before Dental Work

For more than 30 years, people with hip and knee replacements were told they needed to take antibiotics prior to dental appointments.

In 2015 the American Heart Association changed its recommendations. At present it is not recommended that you premedicate prior to dental appointments if you have a prosthetic joint, unless you have a history of complications associated with the joint replacement surgery.

The reasons behind the change include:

1. There is evidence that dental procedures are not associated with prosthetic joint infections.
2. There is evidence that antibiotics provided before dental care do not prevent prosthetic joint infections.
3. There are potential harms of antibiotics including risk for anaphylaxis, antibiotic resistance, and opportunistic infections like Clostridium Dificile.

Certainly everyone's situation is different. We recommend you consult your surgeon or physician again if you were told you should take antibiotics before dental appointments. Please ask if they to provide us a written confirmation of the need for antibiotics in your case, otherwise, under the current guidelines, we may not be able to prescribe them for you.

### Voted Best Office for 20th straight year!

It was our pleasure once again to be voted best Dental office in Framingham. We will continue to try to live up to your vote of confidence each day we come to the office. I truly feel blessed to know everyone that comes in. When I recently turned 60, I was surprised by an onslaught of birthday wishes from many of you. It was a very emotionally moving day and incredibly heartwarming to receive them and realize how lucky and grateful I am to be able to have had this experience and to be able to get to know and be part of the lives of so many people. I am sure the entire staff feels the same way. Thank you all!

### Dental Safety in the News

Two areas of concern regarding dentistry have recently been in the news.

First, a study came out tying use of *Glide* floss to increased levels of polyfluoroalkyl substances (PFAS) in the body. According to the American Dental Association, review of the data and the reasoning behind the suggested correlation show the study to be faulty and inconclusive. Unfortunately there are too many items in our everyday life that contain similar materials and could have accounted for the results.

Certainly, no one wants to increase levels of potentially harmful chemicals in their body. So, for those who would rather be safe than sorry, there are plenty of other brands of floss without PFAS.

In addition, a Netflix TV series has raised questions about the safety of root canals. In short, this is based on a long-debunked theory first raised in 1922 and has zero actual science behind it.

No peer-reviewed study (the standard for modern scientific research) has ever shown a link between root canal therapy and cancer or heart attacks. For a more thorough explanation I would direct you to a well-written article on the subject by Scott Froum and Omar Ikurm.

### OFFICE HOURS

Mark Fried, DMD

Julie Werman, DMD • Annie Le, DMD • Sarah Shih, DMD

61 Edgell Road • Framingham, MA 01701

Monday	8 a.m. – 8 p.m.
Tuesday	7:30 a.m. – 8 p.m.
Wednesday	8 a.m. – 8 p.m.
Thursday	8 a.m. – 5 p.m.
Friday	8 a.m. – 2 p.m.
Saturday	By appointment

Appointments & Emergencies  
(508) 242-3259

Also, see us on the Web at [www.drmarkfried.com](http://www.drmarkfried.com)