

Last fall, I was plagued by a mysterious string of toothaches. Several dental appointments and two complicated emergency root canals later, my endodontist helped me identify the culprit — berry-flavored cough syrup.

For two years, I would take a shot of the liquid every night before bed to help me sleep through some lingering Covid symptoms. Because I did this after I had brushed my teeth, the syrup slowly damaged my tooth enamel, resulting in an infection that required two root canals.

The treatment involves drilling into the innermost layer of the tooth to remove tissue that has become inflamed or infected — often as a result of cracked teeth, deep cavities or issues from previous dental work. Around 15 million root canals are performed in the United States each year.

What else, I wondered, might increase my risk of needing more root canals in the future? I asked dentists and endodontists across the country to explain some of their most frequent causes — and how to avoid them.

Dry Mouth

Saliva is crucial for protecting your teeth, said Dr. Katherine Taylor, a dentist in Clifton, N.J. It washes away food and kills bacteria. And when you produce less saliva, decay-causing bacteria can flourish, potentially resulting in an infection that requires a root canal, she said.

Some prescription drugs, including many antidepressants, opioids, beta blockers and antibiotics, can cause dry mouth, as can some over-the-counter medications like antihistamines and decongestants.

Dr. Saul Pressner, my dentist in Manhattan, told me about one patient who had [to take steroids for two years](#), which dried out her mouth and led to tooth decay that caused mineral loss in her jaw and teeth. “She needed surgery, lost two teeth and needs implant work,” he said.

Other causes of dry mouth include [dehydration](#), chemotherapy treatments, smoking and even [wearing face masks](#) (which promote mouth breathing), Dr. Taylor added.

Special dry-mouth rinses, lozenges and sprays can provide immediate relief, according to Dr. Taylor. Chewing sugarless gum, running a humidifier and drinking more water can help, too.

“When my uncle had tongue cancer, the radiation caused severe dry mouth, so his dentist gave him disposable mouth swabs” to keep his mouth moist, said Dr. Nava Fathi, an endodontist in San Francisco.

Sugary and Acidic Foods and Drinks

It's common knowledge that [sugary candies, baked goods and sodas](#) can lead to tooth decay. But foods and drinks with natural sugars, like fruit and fruit juices, can also cause harm.

The raisins and dried berries in trail mix, for instance, contain natural sugars and can stick to the grooves of your teeth, increasing the risk of decay, said Dr. Lori Aleksic, a dentist in Missoula, Mont. Acidic foods and drinks like carbonated beverages, beer, wine, coffee and citrus fruits can also cause trouble. "Think of your mouth as a porcelain sink," Dr. Aleksic added. "All that acidity can make it crumble."

I asked my endodontist, Dr. Michael L. Sosnay, about some unusual cases he's seen. He recalled a young patient who often chewed on [vitamin C tablets](#). The ascorbic acid in the tablets caused serious dental erosion that required multiple root canals. The same damage can happen if you regularly chew or suck on sugary, sticky or acidic supplements, medications or lozenges like gummy vitamins, antacids or cough drops.

Even some health conditions that result in stomach acid entering your mouth, such as sleep apnea, acid reflux, bulimia nervosa or morning sickness, increase the risk of erosion, the experts said.

Adding milk or cream to coffee and tea can help protect your teeth from the acidity, said Dr. Rico Short, an endodontist in Smyrna, Ga. And avoid putting anything sugary or acidic in your mouth after flossing and brushing. "The last thing you should put into your mouth at night is a toothbrush," said Dr. Denis Simon, an endodontist in Baton Rouge, La.

Smoking and Vaping

Smoking cigarettes, cigars and marijuana can promote plaque and tartar buildup, stain your teeth and increase the risk of gum disease, Dr. Simon said.

The aerosol in vaping products also contains the chemical propylene glycol, which breaks down into acids that damage the enamel of your teeth, Dr. Short added.

If you smoke or vape, consider [strategies for cutting back or quitting](#), including nicotine patches and gums, support groups or talk therapy.

Dental Traumas

Anything that cracks, chips or causes other damage to your teeth can allow bacteria to infect the tooth's pulp, increasing the need for root canals.

Dr. Short has seen patients who've broken or chipped teeth on summer vacations after riding bikes with no hands, running around the swimming pool and hitting their faces on the concrete, or doing extreme or contact sports. "Root canals can save teeth that would otherwise have to be extracted," he said.

Mouth jewelry like tongue and lip piercings can also sometimes crack or break your teeth, Dr. Short added. Clenching or grinding your teeth can do the same, said Dr. Purvi Y. Patel, a dentist in Sugar Land, Texas.

Chewing on hard candy, popcorn kernels or even your nails can damage teeth, Dr. Pressner said. He recalled a patient who had fractured her tooth after regularly chewing on ice cubes and needed a root canal.

Wearing a mouth guard while sleeping or playing contact sports can help protect your teeth, the experts said. Dr. Fathi also suggested that parents ask dentists to apply sealants — thin, plastic coatings that prevent cavities — on the permanent molars of children between the ages of 6 and 14. “It’s not that expensive, they can last five years, and it stops the decay process,” she said.

Occupational Exposures

People who work near toxic fumes or chemicals, such as those in manufacturing or welding or in scientific labs, [can be exposed](#) to acids, solvents, metallic dust and other substances that can damage tooth enamel and increase the risk of decay, Dr. Fathi said, whether it’s through their mouth, nose or skin. Even pastry chefs and workers at bakeries, candy factories and fruit and sugar mills can have compromised oral health.

“Walking into a sugar mill is like walking inside a cake,” Dr. Simon said. “Sugar’s in the air.”

Past Dental Problems or Procedures

A cavity that was filled 30 years ago might not hold up to all of the biting, chewing and drinking you do every day, Dr. Short said. A damaged filling can allow bacteria to get in and cause more cavities that can lead to root canals, Dr. Patel warned.

The same risk exists for people with braces, he added, and for those with wisdom teeth that should’ve been removed and lean the wrong way, allowing food to get stuck.

Improper dental care in early life can also lead to future problems. Dr. Short said his mother couldn’t afford to take him to the dentist when he was little, and nobody explained the importance of oral hygiene to him. So he kept eating sweets at night without brushing his teeth, which eventually destroyed his tooth enamel and required him to get fillings deep into his teeth as an adult. He said he needed eight root canals. Now, as an endodontist, he wants to help children avoid the problems he had.

While you can’t change the past, you can still take preventive measures. See a dentist immediately if you have a toothache or swelling, and make regular appointments to ensure that old fillings are holding up and that no new cavities are forming. If you are prone to dental issues like gum disease or cavities, Dr. Patel recommended more frequent checkups, about every three months if your budget or insurance allows.

Indeed, after realizing that a \$200 visit with X-rays paid out of pocket was preferable to another \$2,000 root canal, I made an extra appointment to see my dentist this spring.