

## **TOXIC DENTISTRY**

### **Root Canals**

Do you have a chronic degenerative disease? If so, have you been told, “It’s all in your head?”

Well, that might not be that far from the truth...the root cause of your illness may be in your mouth.

There is a common dental procedure that nearly every dentist will tell you is completely safe, despite the fact that scientists have been warning of its dangers for more than 100 years.

Every day in the United States alone, 41,000 of these dental procedures are performed on patients who believe they are safely and permanently fixing their problem.

What is this dental procedure?

The root canal.

More than 25 million root canals are performed every year in this country.

Root-canaled teeth are essentially “dead” teeth that can become silent incubators for highly toxic anaerobic bacteria that can, under certain conditions, make their way into your bloodstream to cause a number of serious medical conditions—many not appearing until decades later.

Most of these toxic teeth feel and look fine for many years, which make their role in systemic disease even harder to trace back.

Sadly, the vast majority of dentists are oblivious to the serious potential health risks they are exposing their patients to, risks that persist for the rest of their patients’ lives. The

American Dental Association claims root canals have been proven safe, but they have NO published data or actual research to substantiate this claim.

Were it not for a brilliant pioneering dentist who, more than a century ago, made the connection between root-canaled teeth and disease, this underlying cause of disease may have remained hidden to this day. The dentist's name was Weston Price—regarded by many as the greatest dentist of all time.

Dentists would be doing an enormous service to public health if they familiarized themselves with the work of Dr. Weston Price. Unfortunately, his work continues to be discounted and suppressed by medical and dental professionals alike.

Dr. Price was a dentist and researcher who traveled the world to study the teeth, bones, and diets of native populations living without the “benefit” of modern food. Over 100 years ago, Price became suspicious that root-canaled teeth always remained infected, in spite of treatments. Then one day, he recommended to a woman, wheelchair bound for six years, to have her root canal tooth extracted, even though it appeared to be fine.

She agreed, so he extracted her tooth and then implanted it under the skin of a rabbit. The rabbit amazingly developed the same crippling arthritis as the woman and died from the infection ten days later. But the woman, now free of the toxic tooth, immediately recovered from her arthritis and could now walk without even the assistance of a cane.

Price discovered that it's mechanically impossible to sterilize a root-canaled (root-filled) tooth.

He then went on to show that many chronic degenerative diseases originate from root-filled teeth—the most frequent being heart and circulatory diseases. He actually found sixteen different causative bacterial agents for these conditions. But there were also strong correlations between root-filled teeth and diseases of the joints, brain and nervous system.

Dr. Price went on to write two groundbreaking books in 1922 detailing his research into the link between dental pathology and chronic illness. Unfortunately, his work was deliberately buried for seventy years, until finally one endodontist named George Meinig

recognized the importance of Price's work and sought to expose the truth.

Dr. Meinig, a native of Chicago, was a U.S. Army officer during World War II before moving to Hollywood to become a dentist for the stars. He eventually became one of the founding members of the American Association of Endodontists (root canal specialists).

In the 1990s, he spent eighteen months immersed in Dr. Price's research. In June of 1993, Dr. Meinig published the book *Root Canal Cover-Up*, which continues to be the most comprehensive reference on this topic today.

Your teeth are made of the hardest substances in your body.

In the centre of each tooth is the pulp chamber, a soft living inner structure that houses blood vessels and nerves. Surrounding the pulp chamber is the dentin, which is made of living cells that secrete a hard mineral substance. The outermost and hardest layer of your tooth is the white enamel, which encases the dentin.

The roots of each tooth descend into your jawbone and are held in place by the periodontal ligament. In dental school, dentists are taught that each tooth has one to four major canals. However, there are accessory canals that are never mentioned. Literally miles of them!

Just as your body has large blood vessels that branch down into very small capillaries, each of your teeth has a maze of very tiny tubules that, if stretched out, would extend for three miles. Weston Price identified as many as 75 separate accessory canals in a single central incisor (front tooth).

Microscopic organisms regularly move in and around these tubules, like gophers in underground tunnels.

When a dentist performs a root canal, he or she hollows out the tooth, then fills the hollow chamber with a substance (called gutta percha), which cuts off the tooth from its blood supply, so fluid can no longer circulate through the tooth. But the maze of tiny tubules remains. And bacteria, cut off from their food supply, hide out in these tunnels where they

are remarkably safe from antibiotics and your own body's immune defenses.

Under the stresses of oxygen and nutrient deprivation, these formerly friendly organisms morph into stronger, more virulent anaerobes that produce a variety of potent toxins. What were once ordinary, friendly oral bacteria mutate into highly toxic pathogens lurking in the tubules of the dead tooth, just awaiting an opportunity to spread.

No amount of sterilization has been found effective in reaching these tubules—and virtually every single root-canaled tooth has been found colonized by these bacteria, especially around the apex and in the periodontal ligament. Oftentimes, the infection extends down into the jawbone where it creates cavitations—areas of necrotic tissue in the jawbone itself.

Cavitations are areas of unhealed bone, often accompanied by pockets of infected tissue and gangrene. Sometimes they form after a tooth extraction (such as a wisdom tooth extraction), but they can also follow a root canal. According to The Weston Price Foundation, in the records of 5,000 surgical cavitation cleanings, only two were found healed.

And all of this occurs with few, if any, accompanying symptoms. So you may have an abscessed dead tooth and not know it. This focal infection in the immediate area of the root-canaled tooth is bad enough, but the damage doesn't stop there.

As long as your immune system remains strong, any bacteria that stray from the infected tooth are captured and destroyed. But once your immune system is weakened by an accident, illness or other trauma, your immune system may be unable to keep the infection in check.

These bacteria can migrate into surrounding tissues by hitching a ride into your bloodstream, where they are transported to new locations to set up camp. The new location can be any organ or gland or tissue.

Dr. Price was able to transfer diseases harbored by humans to rabbits, by implanting

fragments of root-canaled teeth, as mentioned above. He found that root canal fragments from a person who had suffered a heart attack, when implanted into a rabbit, would cause a heart attack in the rabbit within a few weeks.

He discovered he could transfer heart disease to the rabbit 100 percent of the time! Other diseases were more than 80 percent transferable by this method. Nearly every chronic degenerative disease has been linked with root canals, including:

- Heart disease
- Kidney disease
- Arthritis, joint, and rheumatic diseases
- Neurological diseases (including ALS and MS)
- Autoimmune diseases (Lupus and more)

There may also be a cancer connection. Dr. Robert Jones, a researcher of the relationship between root canals and breast cancer, found an extremely high correlation. He claims to have found the following correlations in a five-year study of 300 breast cancer cases:

- 93 percent of women with breast cancer had root canals
- 7 percent had other oral pathology
- Tumours, in the majority of cases, occurred on the same side of the body as the root canal(s) or other oral pathology

Dr. Jones claims that toxins from the bacteria in an infected tooth or jawbone are able to inhibit the proteins that suppress tumor development. A German physician reported similar findings. Dr. Josef Issels reported that, in his 40 years of treating “terminal” cancer patients, 97 percent of his cancer patients had root canals. If these physicians are correct, the cure for cancer may be as simple as having a tooth pulled, then rebuilding your immune system.

How are these mutant oral bacteria connected with heart disease or arthritis? The ADA and the AAE claim it’s a “myth” that bacteria found in and around root-canaled teeth can

cause disease. But they base that on the misguided assumption that the bacteria in these diseased teeth are the SAME as normal bacteria in your mouth—and that's clearly not the case.

Today, bacteria can be identified using DNA analysis, whether they're dead or alive, from their telltale DNA signatures.

In a continuation of Dr. Price's work, the Toxic Element Research Foundation (TERF) used DNA analysis to examine root-canaled teeth, and found bacterial contamination in all samples tested. They identified 42 different species of anaerobic bacteria in 43 root canal samples. In cavitations, 67 different bacteria were identified among the 85 samples tested, with individual samples housing between 19 to 53 types of bacteria each. The bacteria they found included the following types:

- Capnocytophagaohracea
- Fusobacteriumnucleatum
- Gemellamorbillorum
- Leptotrichiabuccalis
- Porphyromonasgingivalis

Are these just benign, ordinary mouth bugs? Absolutely not. Four can affect your heart, three can affect your nerves, two can affect your kidneys, two can affect your brain, and one can infect your sinus cavities... so they are anything BUT friendly!

Approximately 400 percent more bacteria were found in the blood surrounding the root canal tooth than were found in the tooth itself, suggesting the tooth is the incubator and the periodontal ligament is the food supply. The bone surrounding root-canaled teeth was found even HIGHER in bacterial count... not surprising, since bone is a virtual buffet of bacterial nutrients.

There is no other medical procedure that allows a dead body part to remain in your body. When your appendix dies, it's removed. If you get frostbite or gangrene on a finger or toe,

it is amputated. If a baby dies in utero, the body typically initiates a miscarriage.

Your immune system doesn't care for dead substances, and just the presence of dead tissue can cause your system to launch an attack, which is another reason to avoid root canals—they leave behind a dead tooth.

Infection, plus the autoimmune rejection reaction, causes more bacteria to collect around the dead tissue. In the case of a root canal, bacteria are given the opportunity to flush into your bloodstream every time you bite down.

The ADA rejects Dr. Price's evidence, claiming root canals are safe, yet they offer no published data or actual research to substantiate their claim. The American Heart Association recommends a dose of antibiotics before many routine dental procedures to prevent infective endocarditis (IE) if you have certain heart conditions that predispose you to this type of infection.

So, on the one hand, the ADA acknowledges oral bacteria can make their way from your mouth to your heart and cause a life-threatening infection.

But at the same time, the industry vehemently denies any possibility that these same bacteria—toxic strains KNOWN to be pathogenic to humans—can hide out in your dead root-canaled tooth to be released into your blood stream every time you chew.

Is this really that large a leap? Could there be another reason so many dentists, as well as the ADA and the AAE, refuse to admit root canals are dangerous? Well, yes, as a matter of fact, there is. Root canals are the most profitable procedure in dentistry.

We strongly recommend never getting a root canal. Risking your health to preserve a tooth simply doesn't make sense. Unfortunately, there are many people who've already had one. If you have, you should seriously consider having the tooth removed, even if it looks and feels fine. Remember, as soon as your immune system is compromised, your risk of developing a serious medical problem increases—and assaults on your immune system are far too frequent in today's world.

If you have a tooth removed, there are a few options available to you.

**Partial denture:** This is a removable denture, often just called a “partial.” It’s the simplest and least expensive option.

**Bridge:** This is a more permanent fixture resembling a real tooth but is more involved and expensive to build.

**Implant:** This is a permanent artificial tooth, typically titanium, implanted in your gums and jaw. There are some problems with these due to reactions to the metals used. Zirconium is a newer implant material that shows promise for fewer complications.

But just pulling the tooth and inserting some sort of artificial replacement isn’t enough.

Dentists are taught to remove the tooth but leave your periodontal ligament. But as you now know, this ligament can serve as a breeding ground for deadly bacteria. Most experts who’ve studied this recommend removing the ligament, along with one millimeter of the bony socket, in order to drastically reduce your risk of developing an infection from the bacterially infected tissues left behind.

We strongly recommend consulting a biological dentist. They are uniquely trained to do these extractions properly and safely, as well as being adept at removing mercury fillings, if necessary. Their approach to dental care is far more holistic and considers the impact on your entire body—not JUST your mouth.

### **Mercury Fillings**

Did you know that mercury is a highly toxic element? In fact, there is no known safe level of mercury exposure.

In the United States, “silver” fillings are commonplace. Yet time and time again, research shows that silver dental fillings expose you to the harmful effects of mercury.



To understand why mercury is toxic to your health and should NOT be living inside your mouth, let's first look at what mercury is and how it came to be used in the dental industry.

Mercury is a naturally occurring chemical element that exists in two main forms: methylmercury and elemental mercury.

Methylmercury is mercury combined with carbon. Though this toxic form of mercury is invisible to the naked eye, it's commonly found throughout the environment. For example, it's in water, soil, plants, and animals— particularly fish. It's also common in many household items such as fluorescent lights, batteries, and latex paint.

Elemental mercury is when it has not yet reacted with another substance. Elemental mercury looks like a silvery metal liquid material. This form of mercury will evaporate into a toxic vapor when heated. Elemental mercury is common in items such as thermometers and barometers and also in – you guessed it – silver fillings.

Although the name implies that the filling is made out of silver, in reality it only has about 32% of this material. The majority of a silver filling (50%) is actually mercury. Your filling also has trace amounts of tin, copper, and zinc.

When mixed together, these components create a hard and durable material: amalgam. This dental amalgam is filled into decaying teeth (often those with cavities) to help strengthen them and prevent their removal.

Mercury has been used in fillings since the 19th century, but has faced controversy since the beginning.

Shortly after the invention of amalgam, numerous harmful effects were widely reported. Mercury poisoning became a top concern and many dentists vowed to stop using the material. However, the majority of dentists continued to use amalgam fillings because they were much cheaper, faster, and easier to place than traditional gold materials

Flash-forward to today and amalgam fillings have been placed in the mouths of hundreds of millions. Meanwhile, Sweden, Norway, and Denmark have banned or restricted the use of amalgam fillings due to its proven toxic effects.

Despite numerous studies and evidence, the American Dental Association continues to highlight dental amalgam as a safe, affordable, and durable material. Even so, this viewpoint has not gone without criticism from other organizations, including the International Academy of Oral Medicine and Toxicology (IAOMT)

In one report the organization stated: “The International Academy of Oral Medicine and Toxicology vehemently disputes recent allegations made by the American Dental Association (ADA) that there is no scientific evidence validating the harmful health effects of dental mercury fillings. The ADA continues to support its self-serving view by denying that mercury fillings are dangerous. Clearly, public health is not an ADA priority.”

If you have a silver filling, every time you chew a small amount of mercury from your filling (about 2-20 micrograms per day) is released into your body.

Chewing gum is especially problematic as it releases an even greater amount of mercury into your system. An increase in temperature in your mouth, for instance when you drink hot coffee or tea, will also encourage the release of mercury vapors in your mouth.

The effects of mercury-laden fillings are scary. This can include tremors, insomnia, headaches, nerve damage, kidney problems, and respiratory failure.

In one recent study by the University of Washington, researchers found that the low-level release of mercury toxins into the body from a dental tooth filling can lead to long-term brain damage.

It's important to note that pregnant women and those who plan to get pregnant are especially at risk. Mercury exposure has been proven to have a devastating impact on unborn babies and children.

Although it will be difficult to remove the mercury already in your system, you can prevent it from continuing to build.

**Your best option is to remove your amalgam fillings as soon as you can.**

Removing silver fillings and replacing them with a safe, non-toxic material is a common dental procedure. Always make sure you have this painless procedure completed by an experienced holistic dentist who understands how to safely and effectively remove amalgam fillings.

On the Gold Coast, we recommend John Sotis (Holistic Dentist) at 07 5644 6000.

## **TOOTHPASTE**

You might not think much about the ingredients in your toothpaste compared to the ingredients in your food or even other personal care products, but those pea-sized dollops on your toothbrush twice a day add up.

Over the course of a lifetime, the average American uses about 20 gallons of toothpaste, and even if you spit most of it out, some of the chemicals it contains make their way into your bloodstream.

Your mouth is actually one of the most absorbent places in your entire body. This is why some drugs are administered sublingually, or under your tongue.

While you're dutifully brushing and swishing, the ingredients in your toothpaste enter your mouth and gums, which are the gateway to every system in your body.

This is why you need to be very careful when choosing toothpaste. Many popular brands contain questionable ingredients that you're far better off avoiding. These include:

### **1. Triclosan**

The popular toothpaste "Colgate Total" contains an antibacterial chemical called Triclosan, which allows the company to tout it as the "only toothpaste approved by the

FDA to help fight plaque and gingivitis.”

But while Triclosan has been shown to help prevent gingivitis, the benefit comes at a steep price. The chemical has been linked to concerns over antibiotic resistance and endocrine disruption.

Endocrine-disrupting chemicals can promote a wide variety of health problems, including breast, ovarian, prostate, and testicular cancer, preterm and low birth weight babies, precocious puberty in girls, and undescended testicles in boys.

Some animal studies showed that Triclosan caused fetal bone malformations in mice and rats, which may hint at hormonal effects. Further, Triclosan may interfere with a type of cell signaling in brain, heart, and other cells, such that researchers noted it “may not be worth potential risks.”

The chemical has also been linked to cancer, with research finding Triclosan may promote breast cancer. The state of Minnesota has already banned most uses of Triclosan, but it’s still widely sold across the world in toothpaste, hand soap, makeup, and more.

Toothpaste appears to be one of the most potent delivery vehicles for the chemical, as research found people who brushed their teeth with Colgate Total had more than five times as much Triclosan in their urine as those who did not.

## **2. Sodium Lauryl Sulfate (SLS)**

Many toothpastes contain surfactants such as sodium lauryl sulfate, sodium laureth sulfate (SLS), or sodium lauryl ether sulfate (SLES). Surfactants are chemicals responsible for the foaming action of the toothpaste, but they also interfere with the functioning of your taste buds by breaking up the phospholipids on your tongue.

This enhances bitter tastes and is thought to be the reason that foods tastes bad after you’ve brushed your teeth.

SLS has even been linked to skin irritation and painful canker sores, with research

suggesting an SLS-free toothpaste should be used for people with recurring sores.

However, one of the main problems with SLS is that the manufacturing process (ethoxylation) results in it being potentially contaminated with 1,4 dioxane, a carcinogenic byproduct. The manufacturing process also releases carcinogenic volatile organic compounds into the environment.

SLS is also registered as an insecticide and may have toxic effects to marine life, including fish and crustaceans.

The manufacturers sought approval to market SLS as a pesticide for organic farmers, but the application was denied because of its potential for environmental damage.

### **3. Artificial Sweeteners**

Aspartame and other artificial sweeteners are often added to commercial toothpastes. Aspartame is primarily made up of aspartic acid and phenylalanine. Phenylalanine has been synthetically modified to carry a methyl group, which provides the majority of the sweetness.

That phenylalanine methyl bond, called a methyl ester, is very weak, which allows the methyl group on the phenylalanine to easily break off and form methanol. You may have heard the claim that aspartame is harmless because methanol is also found in fruits and vegetables.

However, in fruits and vegetables, the methanol is firmly bonded to pectin, allowing it to be safely passed through your digestive tract. Not so with the methanol created by aspartame; there it's not bonded to anything that can help eliminate it from your body.

That's problem number one.

Problem number two relates to the fact that humans are the only mammals who are NOT equipped with a protective biological mechanism that breaks down methanol into harmless formic acid.

In humans, methyl alcohol travels through your blood vessels into sensitive areas, such as your brain, where methanol is converted to formaldehyde. And since there's no catalase present, formaldehyde is free to cause enormous damage in your tissues.

Symptoms of methanol poisoning include headaches, ear buzzing, dizziness, nausea, gastrointestinal disturbances, weakness, vertigo, chills, memory lapses, numbness, shooting pains in the extremities, behavioral disturbances, and neuritis.

#### **4. Sodium Fluoride**

Sodium Fluoride has long been heralded as the answer to decaying teeth, but it's been receiving increasing scrutiny in recent years, and for good reason. A groundbreaking study uncovered that the supposedly beneficial fluorapatite layer formed on your teeth from fluoride is a mere six nanometers thick.

To understand just how thin this is, you'd need 10,000 of these layers to get the width of a strand of your hair! Scientists now question whether this ultra-thin layer can actually protect your enamel and provide any discernible benefit since it is quickly eliminated by simple chewing.

Fluoride toothpaste is often the largest single source of fluoride intake for young children, and is a major risk for disfiguring dental fluorosis. This is because children swallow the paste that they put in their mouth.

In fact, research has shown that it is not uncommon for young children to swallow more fluoride from toothpaste alone than is recommended as an entire day's ingestion from all sources.

Swallowing fluoride, as is the case with fluoridated drinking water, is especially detrimental to your health, as the science clearly demonstrates that fluoride is a toxic chemical that accumulates in your tissues over time, wreaks havoc with enzymes, and produces a number of serious adverse health effects, including neurological and endocrine dysfunction.

Children are particularly at risk for effects of overexposure.

## **5. Propylene Glycol**

Propylene glycol is a mineral oil that is used in antifreeze, paints, enamels, and airplane de-icers. The pharmaceutical-grade form is used in many personal care products, including toothpaste, as a surfactant. Research on the safety of propylene glycol in personal care products is lacking, although it's a known skin, eye, and lung irritant and may cause organ system toxicity. Clearly not a substance for brushing your teeth!

## **6. Diethanolamine (DEA)**

DEA is found in many foaming products such as toothpaste. It's a known hormone disrupter and can react with other ingredients to form a potential carcinogen called NDEA (N-nitrosodiethanolamine), which is readily absorbed through the skin and has been linked with cancers of the stomach, esophagus, liver, and bladder.

The Environmental Working Group (EWG) ranks DEA as a number 10 in its database (the most toxic score) due to high concerns of organ system toxicity, contamination concerns and irritation, along with moderate cancer risk. The California Environmental Protection Agency lists DEA as a possible human carcinogen.

## **7. Microbeads**

Microbeads are tiny plastic pellets found in body washes, facial scrubs, toothpaste, and more. Microbeads go down your drain, through the filters at most wastewater treatment plants, and out into the environment. Plastic microbeads absorb toxins from the water and are eaten by a wide variety of marine life and, ultimately, by humans as well. There's good reason to boycott any toothpaste containing microbeads, even aside from the obvious environmental threat. Last year, a Dallas dental hygienist reported finding microbeads in patients' teeth.

The bits were found in Crest microbead toothpaste and were getting trapped under

patients' gums. This gives food and bacteria an entrance to your gum line, which could actually cause gum disease. Procter & Gamble, which makes Crest, reported they would stop using the microbeads as a result. But while it seems the use of microbeads is on its way out, the Personal Care Products Council (PCPC) is lobbying to have microbeads made from biodegradable plastic such as polylactic acid (PLA) remain in personal care products.

### **Your Diet Is a Major Factor in Tooth Decay**

For maintaining good oral health, brushing and flossing are important, but there's no denying the role of your diet as well. Sugar, in particular, is a primary culprit. As reported by Medical News Today:

“There is overwhelming evidence that sugars are the most important dietary factor in dental disease. Specifically, it is the amount and frequency of free sugars consumed that determine the severity of decay... Consuming a variety of foods rich in nutrients and avoiding those that contain sugars and starches are important for keeping teeth and gums healthy... Sugar and sweets intake should be limited, as bacteria in the mouth need sugar to produce the acids that weaken enamel and damage teeth.

Each time you expose your teeth to sugar the demineralization process begins, and it can take up to an hour for the mouth to return to normal non-acidic PH conditions.”

It helps to remember that achieving oral health is really about promoting balance among the bacteria in your mouth, or your oral microbiome. Cutting back on sugar is crucial for this process, and we've also noticed success in adding fermented vegetables. We used to be severely challenged with plaque — so much so we required frequent visits to the dental hygienist just to keep up with it. Once we started adding fermented vegetables regularly to the diet however, the plaque buildup was dramatically reduced. Dr. Gerry Curatola, who has over 30 years' experience in biological dentistry, explained:

“You have to think about promoting balance... We've looked at organic gardening and the environment around us and even eating organic foods. I'd like everyone to think about



doing ‘organic gardening’ in the mouth. The way you do that is through a strong, healthy, and balanced nutritional protocol. I call it triple-A nutrition – alkalizing, antioxidant-rich, and anti-inflammatory. People should know what nutritional factors are inflammatory. There are inflammatory triggers, whether it’s gluten, dairy, and a number of others. They can vary for different individuals.”

In addition to an alkalizing, antioxidant-rich, and anti-inflammatory diet, he recommends eliminating detergent-based products such as toothpaste and antibacterial and alcohol-based mouthwashes.

We know that eating highly processed foods and sugar certainly causes and worsens dental decay in humans, but there is also evidence of tooth decay in ancient populations, long before there was exposure to refined sugar and white flour, as well as among wild animals today. Even some dolphins, which generally eat no carbohydrates whatsoever — preferring only fish, squid, and crustaceans — have problems with tooth decay. So, clearly, simply following a healthy diet is not enough to explain this phenomenon.

In addition to consuming foods that are part of a healthy diet (and avoiding processed foods and refined sugar), make sure you are getting plenty of omega-3 fats. (Such as in soaked chia seeds.) The latest research suggests even moderate amounts of omega-3 fats can ward off gum disease.

Practicing twice daily brushing and flossing, along with regular cleanings by a biological dentist and hygienist, will ensure that your teeth and gums are as healthy as they can be. Avoid fluoridated water as well as commercial toothpaste brands.