

SPECIAL REPORT

# THE TRUTH ABOUT MERCURY FILLINGS



**TOTAL CARE**  
DENTAL & WELLNESS

## “Silver Amalgam” Fillings

The first mercury dental filling material was made in France in 1816. A Frenchman mixed mercury with shavings from silver coins and formed a soft paste that could easily be packed into a hole in the tooth. It took a few minutes to turn hard, so it could be shaped to fit the tooth well. This was brought to the US in 1830 and was an instant success. This new filling material was inexpensive, easy to use, lasted a long time, and sealed the tooth fairly well. It became popular very quickly.

That first filling material was 50% mercury (the liquid shiny stuff in thermometers) and 50% silver. In fact, 50% of those “silver” fillings today, and 150 years ago, are mercury—despite widespread knowledge that mercury is one of the most deadly metals on the planet, known to cause massive, irreversible neurological damage. Mercury can damage not only your brain but all of your nervous system.

The International Academy of Oral Medicine and Toxicology (IAOMT), a dental organization seeking to bring awareness to the public and to change policy for mercury fillings, wrote a position paper in 2016 about mercury fillings. The organization said, “Thus,

*while these restorations are commonly referred to as ‘silver fillings,’ ‘dental amalgam,’ and/or ‘amalgam fillings,’ the public is often unaware that amalgam refers to the combination of other metals with mercury.”*

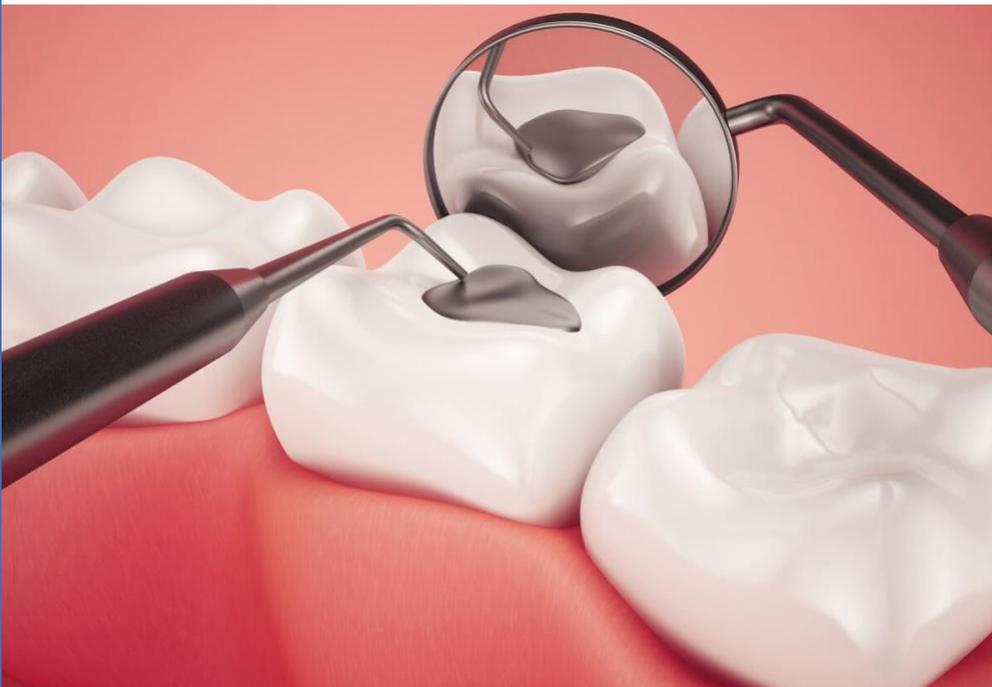
A 2014 Zogby poll established that 57% of Americans did not know that mercury is the main ingredient in amalgam fillings and that 63% thought

***“Mercury is one of the most deadly metals on the planet, known to cause massive, irreversible neurological damage. Mercury can damage not only your brain but all of your nervous system.”***

amalgams as “silver fillings” was misleading. It would be more appropriate therefore to recognize them as “dental mercury amalgam fillings,” “mercury silver fillings,” or “mercury fillings.”

If we remove a mercury filling, the EPA tells us we have to treat that piece of filling like a toxic substance, and I had to install new mercury separators on my vacuum lines to make sure none of the mercury enters the water supply. You might ask why it’s safe in your mouth and not in the water.

If you break a mercury-containing thermometer, there are nine intense steps you are to take to collect and dispose of the mercury, including calling the fire department to dispose of it. We are warned about eating too much fish because of the mercury in the fish. Mercury toxicity is not a secret or anything anyone will debate with you. So why are dentists still placing these fillings?



Recently, I talked to a dentist who graduated from dental school in 2011. I explained my concerns about my patients and myself breathing in mercury vapors as I remove old mercury fillings. He said he's never heard anything about it. He didn't know it could be a problem for patients or dentists.

He graduated in recent years and was taught to place mercury fillings and routinely places them in his practice now. This is not new information. It's obvious the dental community at large doesn't understand the problem.

### **How mercury fillings began**

When this material was introduced, barber/dentists did much of the dental work, and they loved these new fillings. They were easy to place, and they could make money on them. The few doctors that did dentistry at that time were not so excited about it. They knew the symptoms of mercury exposure from watching hat makers. The hat makers would use mercury to turn fur into felt. After repeated exposure to this mercury, the hat makers started showing bizarre behavior. This is where the term "mad hatter" comes from. The mercury quite literally was making them crazy!



The doctors were concerned that mercury was being placed into teeth, but the barbers continued placing them. They were making money on these easy fillings. Mercury/silver fillings were here to stay.

### **Toxic material**

That is the background behind dental mercury fillings, and they are still being used today in nearly 50% of the dental offices in the US. They are called "silver" fillings or "amalgam" fillings, but the components are all the same. There are quite a few dentists, such as myself and the doctors that work with me, that have abandoned them because the safety and science just doesn't make sense.

I was attending a meeting in Switzerland recently and was one of only two dentists from the US at the course. I overheard a conversation between a dentist from England and a dentist from Australia. They were complaining that their governments only regulated amalgam use in children and pregnant women. I told them it was much worse in the U.S. Dentists here can put mercury amalgam fillings in anyone, at any age. There are no regulations.

I am often asked why our government or the FDA or the ADA (*American Dental Association*) doesn't place regulations on these mercury fillings. This is a difficult question to answer because it's loaded with legalities and politics. The ADA was sued over this years ago, and stated that they had no duty to the public in regards to amalgam fillings because the dentist "manufactures" the filling at the time of use, so the dentist is the responsible party.

If the FDA changed its classification of mercury fillings, declaring them unsafe for use, every person that has had an amalgam filling placed by a dentist in the US could join a class action law suit against dentists that have ever placed mercury fillings. The way our government and judicial systems are set up,

*The EU Regulation states that, from 1 July 2018, dental amalgam should not be used in the treatment of children under 15 years of age and in pregnant or breastfeeding women, except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient.*

<https://bda.org/about-the-bda/campaigns/amalgam>

there is no way the governing agencies will change their stance on this.

### Controversy

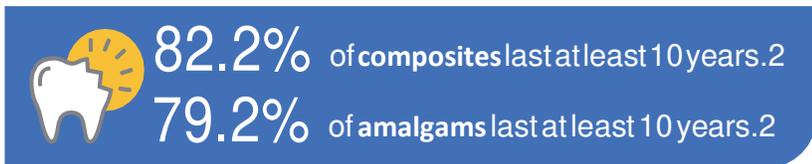
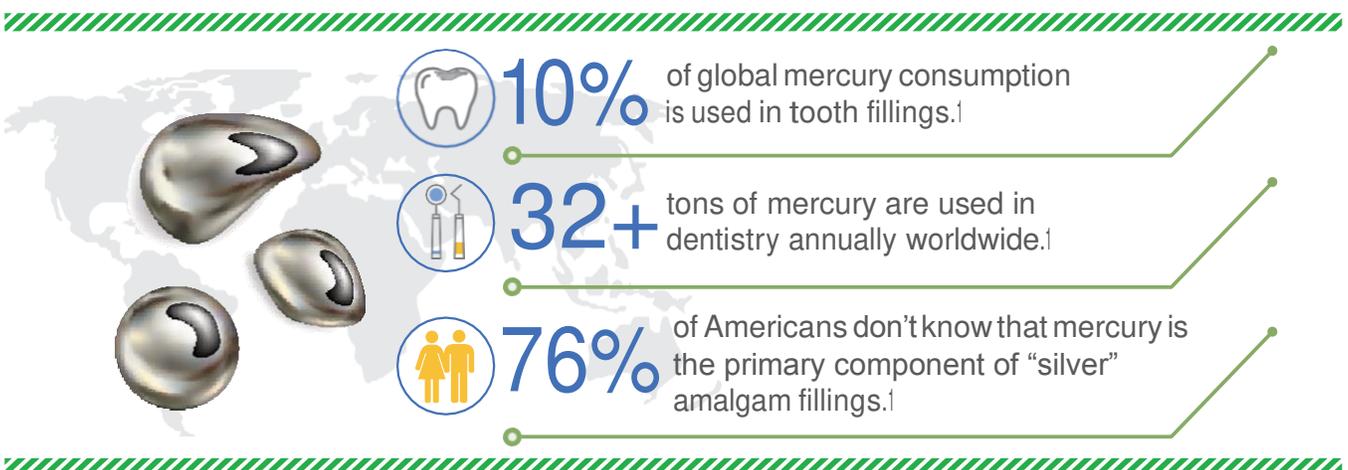
The safety of mercury fillings continues to be a very controversial subject. Dentists have lost their dental licenses for speaking out about their beliefs that mercury fillings are toxic. In fact, there are things I can and can't legally say to you about mercury in fillings. Thankfully, there are some undisputed facts:

- Mercury is the most neuro-toxic, non-radioactive element on the planet. It is more [neurotoxic](#) than arsenic or lead.
- Dental researchers now concede that mercury vapor is released from unstimulated amalgam fillings 24-hours a day.

- Chewing, brushing, temperature increases and clenching/grinding have been shown to release mercury vapor.
- The FDA and the American Dental Association promote amalgam fillings as standard of care dentistry. Dentists who place amalgam fillings do so in good faith, believing in the efficacy, safety, cost-effectiveness, and longevity of amalgams.
- Norway banned dental amalgam in 2008, Sweden banned it in 2009, and Denmark, Estonia, Finland, and Italy use it for less than 5% of tooth restorations. Japan and Switzerland have restricted or almost banned dental amalgam. France has recommended that alternative mercury-free dental materials be used for pregnant women, and Austria,

## Facts about Mercury

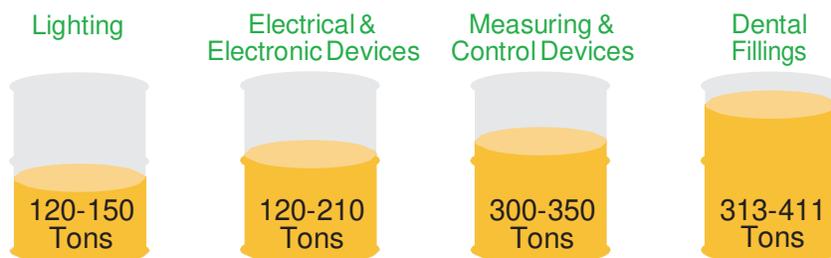
Mercury exposure from dental amalgam is risky for many segments of the population, especially children!



3.7 tons of mercury are discharged each year to Public Owned Treatment Works (POTWs) by dentists, according to EPA studies.<sup>3</sup>

### Mercury Pollution:

Compared with other sources of mercury pollution, the number of tons consumed globally are:



<sup>1</sup> [http://www.toxicteeth.org/CMS\\_Templates/ToxicTeeth/pdf/The-Real-Cost-of-Dental-Mercury-final.aspx](http://www.toxicteeth.org/CMS_Templates/ToxicTeeth/pdf/The-Real-Cost-of-Dental-Mercury-final.aspx)

<sup>2</sup> <https://www.ncbi.nlm.nih.gov/pubmed/16417916>

<sup>3</sup> <https://www.epa.gov/mercury/mercury-dental-amalgam>



Canada, Finland, and Germany have purposely reduced the use of dental amalgam fillings for pregnant women, children, and/or in patients with kidney problems.<sup>51</sup>

- [A 2005 World Health Organization report](#) warned of mercury: "It may cause harmful effects to the nervous, digestive, respiratory, immune systems and to the kidneys, besides causing lung damage. Adverse health effects from mercury exposure can be: tremors, impaired vision and hearing, paralysis, insomnia, emotional instability, developmental deficits during fetal development, and attention deficit and developmental delays during childhood. Recent studies suggest that mercury may have no threshold below which some adverse effects do not occur."

#### **Metal fillings**

So... do mercury fillings affect your health? In that same position paper by the IAOMT in 2016, they presented scores of research pointing to the health implications of mercury fillings. I think this information bears repeating here:

The *World Health Organization* (WHO) and Canada's federal depart-

ment of health (*Health Canada*) [have stated that](#) "mercury vapor from dental amalgam is the greatest source of human exposure to mercury in non-industrial settings."

The IAOMT also has a stance on how these fillings should be considered in the overall picture of health concerns and problems.

*"Additionally, physicians and dentists should, where patients are suffering from pathological states and/or disease of unclear causation, consider in their differential diagnosis whether exposure to mercury released from*

*"Scientific research demonstrates that dental mercury amalgam exposes dental professionals, dental staff, dental patients, and fetuses to releases of mercury vapor, mercury-containing particulate, and/or other forms of mercury contamination. Dental mercury amalgam is therefore not a suitable material for dental restorations.*

*"Furthermore, mercury vapor is known to be released from dental mercury amalgam fillings at higher rates during brushing, cleaning, clenching of teeth, chewing, etc., and mercury is also known to be released during the placement, replacement, and removal of dental mercury amalgam fillings.*

- *A series of studies demonstrate that urinary mercury concentrations consistently increase as the number of amalgam fillings increases.*

*Numerous studies have also demonstrated that the mercury exposure or concentration increases in the following tissues and situations*

- *Due to chewing, brushing, and/or bruxism*
- *In exhaled or intra-oral air of persons with amalgam fillings*
- *In saliva of persons with amalgam fillings*
- *In blood of persons with amalgam fillings*
- *In various organs and tissues including the kidney, liver, pituitary gland, thyroid, and brain*
- *In feces of amalgam bearers*
- *In amniotic fluid, cord blood, placenta, and various fetal tissues including liver, kidney and brain, in association with maternal amalgam load*
- *In colostrum and breast milk in association with maternal amalgam load*

*Mercury's damaging influence on the developing brain and neurological system makes dental mercury amalgam fillings an inappropriate material for use in children, pregnant women, and women of child-bearing age. In fact, research has repeatedly shown the potential for significant impacts to pregnant women, fetuses, and children as a result of dental mercury."*

[-Position paper by the IAOMT](#)

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*–International Academy of Oral Medicine and Toxicology*

*dental mercury amalgam fillings might be a contributing or exacerbating factor in such adverse health conditions. This is because dental mercury amalgam has been associated with a wide-range of adverse health conditions.*

*It should also be remembered that reactions to mercury exposures vary from person to person, including exposures to dental mercury.”*

your decision about your mercury fillings. This choice needs to be yours, and can't be dictated by your dentist or doctor.

When existing amalgam fillings are still in the teeth, chewing and functioning without defects in the fillings themselves, it is your personal choice to have them replaced with other materials, either for health reasons or if you want your teeth to look better. The key is that during the removal, it must be done safely! Continue reading for crucial information about how to have those mercury/amalgam fillings removed.

### **Mercury fillings are bad for teeth and your body**

I've been a mercury-free dentist for nearly 20 years.

I made that decision long before I had my own health challenges with mercury.

I have never liked what mercury fillings do to your teeth. We are going to go back to basic science here.

If you have a bottle with a metal lid that won't

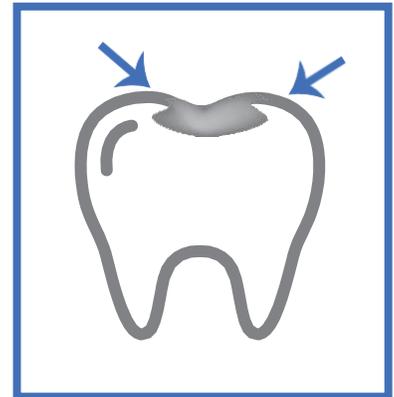


open, what do you do? Put the lid under hot water to loosen it. Why do you do that? Because the metal expands when it is heated, and the lid is easier to get off. The same thing happens in reverse. When the metal gets cold it shrinks.

Now imagine a mercury filling in a tooth. The filling was intentionally formed like an upside down wedge in the tooth, wider at the bottom and narrower at the top. That was done to help the filling stay in your tooth, because there is no “glue”

under a mercury filling.

Continue imagining that upside down wedge as you eat dinner tonight. You start the meal with a delicious soup. It's so hot that you have to blow on each bite. Your metal fillings are expanding with every bite—pushing outward on the walls of the tooth it's wedged into. For dessert, you have apple pie with ice cream on



top. That ice cream hits the metal filling and it starts to shrink, pulling away from the tooth.

Repeat. And repeat. And repeat every time you eat a meal with hot or cold foods. Eventually the crystals in the tooth walls will start to crack. A gap will also start forming around the edges of the filling as the filling expands and shrinks. Bacteria aren't very big, so they can easily slip into that gap between the tooth and the filling. Can you brush underneath a filling? I don't think so! This leads to new cavities underneath your old mercury filling.

### **Life span of mercury fillings**

How often does this shrinking and gap formation happen? I have removed thousands of mercury fillings in my career, and I can, from experience, say

that 90% of those old fillings have a new cavity underneath. And 100% of the teeth have cracks caused by the filling expanding. There are very frequently structural and physical problems with these old mercury fillings, and that alone is enough to recommend they be replaced. Quite simply, mercury fillings aren't a permanent fix for a tooth. They have an average life-span of 8-12 years before they crack the tooth and leak bacteria around the gap that forms from expansion and shrinking. How long have you had your old fillings?

Like I said, I have been a "mercury-free" dentist for many years, and I still am, but after my health scare, I am now also a "mercury-safe" dentist. There is a difference. The greatest exposure to mercury comes when the old filling is drilled out. Since most mercury fillings will need to be replaced for functional or health reasons, it is

essential you

have them removed safely. Safe procedures can reduce exposure by up to 90%.



As my practice has grown, I've needed to expand my office. I worked to acquire the lease of the dentist in the neighboring building, and was assessing what I needed to change before I moved in. He had carpet in all of his dental treatment rooms, and the carpet was 15 years old. I realized it was most likely full of mercury and I couldn't work there until that carpet was replaced with laminate or tile that didn't retain mercury.

I was arranging a time for the flooring installers to come and measure to give me a bid, and was explaining to the current dentist why I was replacing the flooring. He said it was fine because he hadn't placed any mercury filling in over 14 years. I told him I wasn't worried about the mercury from fillings being placed. I explained that the mercury in the carpet would come from all of the mercury fillings he had been drilling out for the last 15 years. He was surprised and said, "It's still a problem at that point? You can get mercury in your body from that?"

This dentist has been practicing for over 25 years and is still completely oblivious to the dangers of mercury, and doesn't understand when the mercury exposure occurs. He is part of the great majority of dentists. If you don't visit an intentionally "mercury-safe" dentist, you can be nearly guaranteed that dentist will not remove the fillings safely. It's not negligence or malpractice, it is misinformation and lack of education in the profession of dentistry in general.



## SAFE REMOVAL PROCEDURES

What are those procedures? The IAOMT has established the **SMART** ([Safe Mercury Amalgam Removal Technique](#)) as a standard in the industry. You want a dentist trained in these procedures, and this training is not available in traditional dental school. The dentist must also have special equipment as detailed below:

- 1 KEEPING IT COOL-** to reduce mercury release, a lot of water is used to keep the filling cool.
- 2 ROCKS, NOT PEBBLES-** the filling is cut into large chunks, which reduces the amount of drilling.
- 3 GET IT ALL OUT-** the vacuum must be very strong and placed as close to the tooth as possible. A special device called a *Clean Up* is added to the end of the vacuum tip to help hold the particles in place.
- 4 TO BREATHE OR NOT TO BREATHE-** avoid breathing through your mouth during the procedure. It is beneficial to have an alternate source of oxygen on your nose, and an impermeable barrier such as a gold coated mask over the nose.
- 5 DAM IT-** a rubber dam won't keep vapors out, but it will keep particles out of your mouth. Must be a non-latex, nitrile rubber dam.
- 6 CLEAN UP, CLEAN UP-** everything in the area and around the area should be rinsed very well after removal, and the mouth rinsed with a slurry of chlorella or charcoal.
- 7 BIG VACUUM-** a very large vacuum is placed right below the chin to minimize mercury exposure – both in particulate and vapor form.
- 8 COVER IT UP-** The dental patient, dentist, dental assistant and any one else in the room should have covers for their body, their head and their face.



### What you need to know before and after removal

Removing mercury fillings, even in a safe way, will always produce a temporary increase in a person's exposure to mercury. You need to understand what that mercury will do in your body and what to do to help your body remove it.

Mercury never exists alone in the body. It attaches to other molecules, particularly ones containing sulfur, like the enzymes glutathione and cysteine. You should increase your levels of glutathione before and after removal by supplementing with liposomal glutathione.

There are a few excellent things you can do with your diet in preparation for mercury removal as well.

- Increase sulfur based foods including vegetables from the cruciferous family (cabbage, garlic, broccoli, cauliflower, kale, collards, radishes, wasabi, etc.), which are rich in sulfur. Fermenting these vegetables is the most nutritious way to consume them.

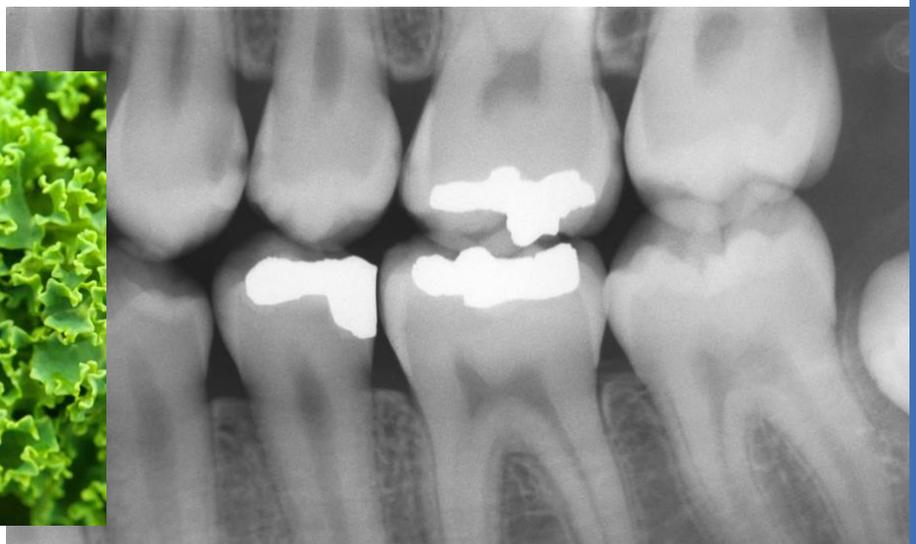


- Garlic is especially powerful, but it's the oil of the garlic that supports detoxification, not the allicin, which is the compound commonly used as an antimicrobial. The take away is that you want the smelly kind of garlic to get the oils, and deodorized garlic is useless for detox! Either eat the garlic raw by chewing it up or purchase a garlic oil supplement.
- Another good binder for heavy metals is chlorella. This is a binder that grabs the mercury and helps remove it from the body. Other binders you'll hear about are clay/zeolites, and pectin. For the kind of mercury found in dental fillings, these bind very weakly, and you would have to take enormous quantities for many years to have much effect, so I don't recommend them.

There are other detox products you can use, but everything should be regulated by your alternative care health provider. Your body cannot handle an increase of these detox substances over a long term, so the treatment should be pulsed – five days on, two days off (to start), working up to ten days on, four days off. If you begin to feel worse, you may be detoxing too quickly.

The body should have the excretory pathways prepared for an increase in mercury after removal as well. The pathways utilized are the kidneys, liver and colon, particularly kidneys for mercury from fillings.

There are many resources online where you can learn more about mercury fillings. Talk to your holistic health care practitioner about whether removal is something they recommend for you.



## Dr. Michelle Coles Jorgensen DDS, FAGD, TNC, CNAS

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Dr. Michelle Jorgensen is an author, speaker, teacher, biologic/holistic dentist, and health and wellness provider. After practicing traditional dentistry for 10 years, Dr. Jorgensen became very sick. Through her own journey to return to health, she discovered she had mercury poisoning from drilling out mercury fillings for her patients without protection. She was concerned that there may be other health-threatening materials or procedures in dentistry, and this concern led her to the Biologic/Holistic Dentistry field.

For the last 10 years she has been paving the way in Biologic/Holistic dentistry, learning from pioneers all over the world. She has created the Total Care Dental Way, a patient CARE centric, health focused method for treating dental and over all health. Patients from around the world seek out her care, and come to Total Care Dental to have their health restored.

She has received certifications as a Therapeutic Nutritional Counselor, a Certified Nutritional AutoImmune Specialist, and is currently enrolled in a program to become a Board Certified Traditional Naturopath. She completed a Holistic Dental Mini-Residency, and is pursuing ongoing training from *Swiss Biohealth* in Switzerland and Costa Rica.

Dr. Jorgensen also teaches and coaches groups of dental professionals across the country who come to

learn from Dr. Jorgensen at her Total Care Academy. Her goal is to change the way dentists look at health. She started and hosts a study group of Alternative Care Practitioners, where they teach each other and collaborate together for better patient care. This group includes Chiropractors, Naturopaths, MDs, Nurse Practitioners, Energy Workers and more.

A prolific writer, she has authored hundreds of blog posts and articles about dentistry, health and nutrition. She is interested in all areas of health and teaches classes to the public on topics ranging from *How to Raise Cavity-Free Kids* to *Fermenting Foods for Health*.

Since founding Total Care Dental in 2001, her dental practice has helped over 20,000 patients in Utah and the U. S. Dr. Jorgensen and her team have been awarded the *Dental Team of the Year* and the *Dental Practice of the Year* at the prestigious *Crown Council Member's Choice Award*. They were also selected as *Best in State in Utah* for multiple years.

When not at work Dr. Jorgensen is busy with her husband, four children, and her own mini-farm, where she loves to grow, harvest and preserve her own food. She loves to read and has a huge library of books on homesteading, gardening, natural health, herbology and so much more.