



Eco-Friendly Dentistry

Oral care that is good for patients, employees and the planet.

At the corner of Front and Ontario Streets in beautiful Stratford, Ontario, there sits a newly renovated, century-old brick home. It is the address of Front Street Dental, a unique dental practice where oral healthcare meets environmental accountability. Here, Front Street Dental is taking an active role in caring for the planet as well as for their patients.

"We couldn't consciously not do it this way," says Dr. Ali Farahani. When he and co-founder Cindy Poitras-Farahani decided to start a practice, they knew they had to create an office environment that would be respectful of the human body and of the earth as a whole.

The first eco-friendly dentistry office in Canada, Front Street Dental employs sustainability practices to reduce consumption and to eliminate or reduce waste and harmful toxins. The office treats patients using "integrative dentistry," a holistic methodology that looks beyond a person's teeth to the underlying

factors that may be causing oral health issues, such as nutrition and emotional well-being.

"Patients are coming to us because of the whole approach we're taking," says Poitras-Farahani. "They realize that as part of doing something for the environment, they also have a choice in terms of their dental care."

ECO-FRIENDLY FROM THE FLOOR UP

Upon entering the warm and tranquil Front Street Dental environment, it becomes immediately apparent that this is no ordinary dental office.

While you probably wouldn't notice the biodegradable flooring, the ultra-low VOC paint on the walls, or the medical-grade air purifier, you would notice that there is no telltale dental office smell in the air.

"The smell that patients associate with the dental office is from a chemical soup," says Dr. Farahani. In a traditional office, a number of different chemical products are used to disinfect the office, clean the instruments and develop X-rays. The harsh chemicals emit their own aroma, and together they create that dental

environment smell that many patients know all too well.

At Front Street Dental, less harmful, natural disinfectants are used to clean surfaces. The instruments are cleaned in a hydrim, a medical-grade, stainless steel dishwasher, rather than in an ultrasonic. This eliminates the need for harsh chemicals such as phenols that form aerosols. Once the instruments have been washed/cleaned, they are sterilized in their stainless steel cassette in a high-pressurized steam sterilizer.

Front Street Dental uses digital imaging rather than traditional X-rays, which means significantly less radiation for patients and employees, no potentially toxic chemicals in the air, and no need for lead foil and silver-containing radiographic fixer solution.

The office is barrier-free, which means that there are no plastic covers on light handles, head rests or air water syringes, all of which are used only once and discarded in traditional offices. Instead, a gentle, non-drying agent is used to wipe the surfaces.

Whenever possible, reusable and biodegradable products are used. The office uses operating-room cotton towels (instead of disposable paper bibs), stainless steel suction tips, glass irrigation syringes, and biodegradable disposable cups.

A dry dental vacuum pump, rather than a wet pump, saves approximately 24,600 gallons of water per year.

For dental assistant Sherry Roy, these green practices not only mean that her workplace is better for her health – they also give her a lot more productive time. "I'm not constantly cleaning an X-ray machine, changing plastic or taking tons of garbage out. Once a week, I wash, dry and sterilize the patient towels, and it takes me just 10 minutes."

"By reducing actual waste and consumption, we're saving significant hidden costs like the extra time it takes for our staff to prep between patients, handle garbage and maintain equipment," adds Dr. Farahani.

IT'S A TEAM EFFORT

Sometimes creating environmentally friendly processes for the dental office calls for creative ingenuity. "When we have a particular issue, we all put our heads together," says Poitras-Farahani, who is the office administrator.

One example of this is the sterilizing of the cotton towels. Once the cotton towels have been washed and dried in Energy Star-rated appliances, they must

be sterilized. At first, sterilizing the cotton towels posed a problem because the lint from the towels was clogging the sterilizer. The team developed a way to sterilize many cotton towels at once using one autoclave self-seal steri bag. Multiple cotton towels are placed together inside the autoclave bag and sterilized, and the towels are ready for patient use!

The autoclave bag is then separated into its plastic and paper parts and recycled, rather than thrown away. This process helps to divert from landfill an estimated 4,680 pieces per average-sized dental office each year.

With any new sterilization method, the Farahanis enlist Roy's help to ensure that the procedure is effective, efficient and complies with strict laws of sterilization.

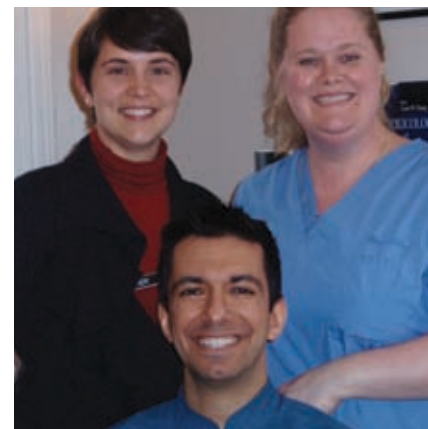
A UNIFIED APPROACH TO PATIENT WELLNESS

At Front Street Dental, it's imperative that all team members believe in the company philosophy. "They have to feel the importance of what we are doing and be excited by it," says Poitras-Farahani.

Having worked with Dr. Farahani previously, Roy, a certified DA, says she was more than happy to follow him to Front Street Dental and embrace a natural approach to dental care. "He was looking outside the box, and I was ready for a new challenge."

Her formal training and desire to help people make Roy a natural fit. "We follow the same procedures as a traditional dental office, except our patients get some extra TLC because we look at each of them a bit differently. Our main goal is their wellness, and our patients know this."

When asked how they measure the benefits of being an eco-friendly dental office, Poitras-Farahani responds that "we benefit every day, in the environment in which we work and in the air we breathe. But the greatest benefit is knowing that we have done the right thing."



The Front Street Dental team: Cindy Poitras-Farahani (left), Dr. Ali Farahani (centre), Sherry Roy, CDA II (right)

BLUEPRINT FOR AN ECO-FRIENDLY DENTAL OFFICE

Prior to opening Front Street Dental, Dr. Farahani partnered with Mittale Suchak, an honours student from the University of Waterloo, to conduct research on the viability of the idea. They concluded that by employing certain sustainable practices, there are tremendous savings to the environment in water, electricity, chemicals and landfill.

"Even if conventional dental offices implement *some* of the recommendations, it would help," says Dr. Farahani. "There are so many little steps that can be taken that over the long term would make such a difference."

Published in 2007, the report outlines several recommendations for sustainability practices. Here is a brief list:

- Use your community's existing recycling program to separately recycle the paper and plastic halves of autoclave bags
- Use a dry dental vacuum pump instead of a wet one
- If using traditional X-rays, recycle fixer and developer solutions, and recycle lead foil from X-rays
- Consider less harmful surface disinfectants, such as tea tree oil and thyme
- Use reusable and biodegradable sundries wherever possible
- Use stainless steel prophylaxis cups instead of disposable prophylaxis-containing cups
- Purchase prophylaxis paste in tubes or tubs, allowing you to use only what you need
- Use an Energy Star washer and dryer, where applicable
- Use fluorescent instead of halogen lighting, where practical

You can find the complete list of recommendations in the JCDA article "Eco-Friendly Dentistry: Not a Matter of Choice" at www.frontstreetdental.ca > Events.