



Early Detection for Tooth Decay

How regular dental visits and simple procedures promote your health and well-being.

BY DR. MELISSA MAKOWSKI OF LAKEVIEW DENTISTRY



Dr. Melissa Makowski and her team at Lakeview Dentistry of Charlevoix are committed to providing exceptional care by utilizing the most advanced dental technology. She has undergone extensive laser training with and holds a mastership in the World Clinical Laser Institute. She is a member of the Academy of Laser Dentistry and has also received training in Botox use specific for dentistry by the American Academy of Facial Esthetics. Dr. Makowski is also a member of the dental honor society Omicron Kappa Upsilon, the Academy of General Dentistry, American Academy of Cosmetic Dentistry, American Dental Association, Michigan Dental Association and the Vacationland District Dental Society. Dr. Makowski dedicates herself to continuing education to bring the most advanced dental care to her patients.



Conservation. Education. Prevention.

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At Lakeview Dentistry of Charlevoix, Dr. Makowski continues to lead the way with innovative dentistry in northern Michigan. Utilizing the most state of the art, non-invasive way to detect early dental decay, she has elected to incorporate the Spectra system by Air Techniques into her practice. Spectra is an FDA approved tool that uses a color visual system and software analysis to provide a picture of the tooth showing where the structure is deteriorating. As early as 1998, research in dental decay detection was recognizing that in the presence of certain light, a chemical that bacteria produce called porphyrin readily fluoresces red whereas sound enamel fluoresces green. The bacteria that are responsible for dental decay, *S.mutans*, produce porphyrin when they are active. Capturing this fluorescence, the Spectra allows for early detection that goes beyond the dentists visual examination and x-ray capability, to identify what was not easily seen by the naked eye. Historically, an x-ray and a sharp dental tool were the only diagnostic tools a dentist had to detect decay. The tooth may have appeared healthy on the surface, but in reality was diseased. By the time the decay was apparent with either of these modalities, the area of decay was quite large, necessitating a larger restorations.

The advanced Spectra system can be used as a baseline which allows patients to be a partner in their dental treatment and better understand the options of treatment or observation. As an image is captured, values are set for specific areas on the teeth and recorded. This allows for comparison as time progresses. At the earliest sign of deterioration, the cavity can be identified and restored. If a cavity is identified and the patient decides not to treat it right away, these previous records can be accessed for comparison. The

Spectra shows the patient the presence of harmful bacteria in the mouth, and corresponding oral hygiene status. This can help motivate the patient to carry out a regimen of better dental care—both at home and through regular check-ups and cleanings at the office. Dr. Makowski continues to bring innovative technology to her practice because her mission is to educate patients about their oral health, prevent decay by disease, and to conserve as much natural tooth structure as possible. Dr. Makowski elected for the Spectra system because it can be used on all areas of a tooth, even areas next to old fillings. Early disease detection is the key and can make a significant difference between patients needing extensive restoration of a tooth versus a surface filling only requiring minimal treatment.

