Technology for Better Patient Care

PLANMECA

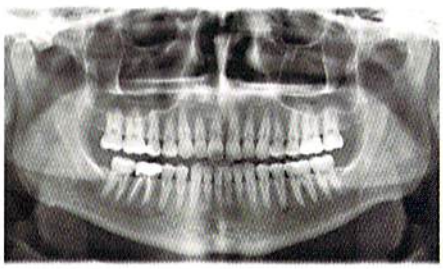
Patients' Guide to Understanding Dental X-rays

We are committed to offering our patients excellence in dentistry and the highest level of patient care. Our investment in state-of-the-art dental technology and products is part of that commitment.

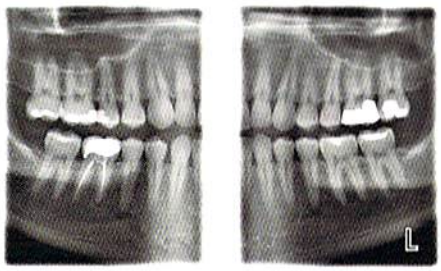
As your dental practitioner, it's my job to promote oral health so you can keep your natural teeth throughout your entire life. It's also my job to provide treatment when disease or conditions require intervention. In our office, we utilize both 2D and 3D x-rays to obtain accurate information about your dentition and surrounding anatomy. X-rays are necessary so we can accurately evaluate your overall oral health and properly diagnose areas of concern.

Digital X-rays

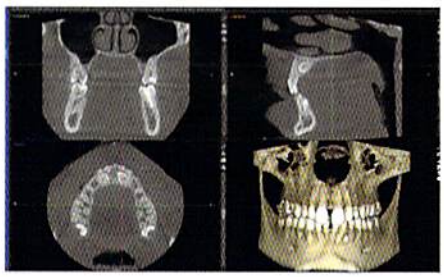
X-rays yield a wealth of information used for evaluation and treatment planning. However, it does expose the area we're imaging to radiation. We want to give you the facts about radiation and alleviate any concerns you may have.



Adult panoramic image



Adult bitewing image

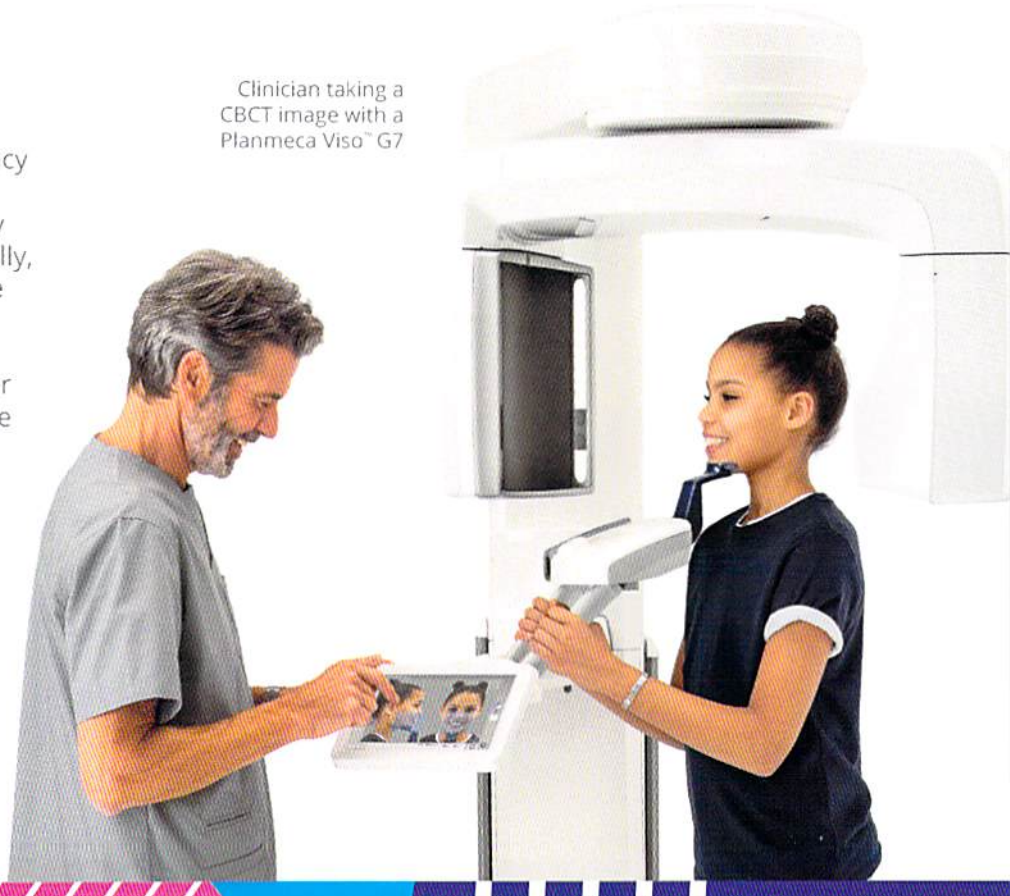


Adult 3D image

What is Radiation?

Radiation is a form of energy in waves. It exists on a spectrum; there is low-frequency radiation such as radio waves and microwaves, and there are high-frequency waves as gamma rays or x-rays. Additionally, we're exposed to radiation in everyday life from taking a flight, living in high altitude area or from the potassium in a banana! Radiation is all around us. However, higher frequency and ionizing radiation should be carefully monitored as it has a higher risk of affecting the cells in our bodies. X-rays utilize this kind of radiation.

Clinician taking a CBCT image with a Planmeca Viso™ G7



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Responsible Imaging

Our number one priority is excellent patient care, and that includes practicing responsible imaging. We don't take x-ray images that are unnecessary. We've also invested in an x-ray imaging unit that offers the industry's lowest radiation. Our 3D x-ray system can take an image with an average reduction of radiation dose up to 77% compared with standard x-ray imaging protocols! That's important to us and one of the reasons we chose this imaging system.

How are Extraoral Images Acquired?

Taking an x-ray image with our imaging unit is simple. You will either stand or sit, for patients in wheelchairs, comfortably in the unit. The clinician will select the proper program and the gantry, the part of the unit that takes the x-ray, will rotate around your head. The scan is painless and takes a few seconds. Images acquired will be available immediately. You will appreciate seeing these images during your patient consultation. They will help you understand the treatment we are recommending and why it's essential.

Better Patient Care

X-rays are a necessary part of dentistry. They allow us to know more about your anatomy for optimal oral health, accurate diagnostics, and efficient treatment planning. Having this information will enable us to perform procedures that are often less invasive, better for you, and offer the best outcomes.

The x-ray system we use is from a company called Planmeca. Planmeca is a Finnish based company and the leader in x-ray technology. We're proud to offer this kind of advanced technology in our office. If you'd like more information, please ask one of our knowledgeable dental team members for a tour!

Item	Dose of Radiation in MicroSieverts
Banana	0.1 µSv
Planmeca ProMax® 3D ULD, small field of view image of a tooth	5.5 µSv
Living within 50 miles of a nuclear power plant	10 µSv per year
Planmeca ProMax® 2D panoramic, medium patient image	17.5 µSv
A flight from New York to Los Angeles	40 µSv
Smoking 1.5 packs of cigarettes	80 µSv
Chest x-ray	100 µSv
Living at sea level	150 µSv per year
Mammogram	300 µSv
Living in Denver, CO	500 µSv per year
Abdominal CT scan	1,400 µSv

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