



P R A C T I C E

MUST H · A · V · E · S

Dentists are overwhelmed with options in materials and techniques. Manufacturers are constantly introducing “new and improved” materials. These materials are often introduced with little evidence to support their claims. There are publications dedicated to product evaluation that can help, along with the feedback of key opinion leaders, but we need to do more. Product research—in vitro studies and others—that is funded by larger corporations with reputable research facilities can be usually trusted, but is always better if it is duplicated independently.

Before you change products or techniques in clinical practice, it is important to spend some time evaluating the material or device. Take a critical look at its composition and examine the information provided by the manufacturer along with what is available in the literature. I am often surprised how many products that become popular have so little bench or clinical data. There have been a number of instances where a material has become very popular and it was later found to be a major clinical failure. Very few products I see introduced to dentistry have any clinical data and even fewer have any long-term clinical data.

I also suggest thinking about your own motivations for switching to a new product. Do you really need it? Is your current product working well? If yes, why are you switching? If not, what do you need and expect from a new product in that category? We need to avoid the urge to be the first on our block to work with a material just because it is a new. I am also not suggesting you be last on the block. I believe that common sense, some review of the evidence, and own our clinical judgment and evaluation can make a world of difference.

As I said a number of years ago in an interview, it’s easy to see the attraction of new products, but it’s important to remember what’s really critical—and that’s technique. New materials help the profession. But some practitioners are too concerned with switching to a new material and not concerned enough with doing the procedure correctly. The reality is, when there is a failure in dentistry, the majority of the time it’s the technique or the operator that failed.

GERARD KUGEL, DMD, MS, PHD

WHAT DO YOU CONSIDER YOUR “MUST HAVE” PRODUCTS?

COMPOSITES

Tetric EvoCeram
SonicFill
Filtek
GrandioSO

DIGITAL IMAGING/ RADIOGRAPHY

DEXIS
Carestream
Schick

ADHESIVES/ BONDING/CEMENT

VOCO Futurabond
Panavia
Prompt L

MISC. PRODUCTS

Viscostat
DENTSPLY Cavitron
Ultradent Whitening

“Long gone are the days of an open flame and setting my hair on fire—never a good smell with which to infuse the office!”



Digital Camera

The shutter froze recently in my Nikon D100 (a work horse for the past 10 years) and I felt like I had lost the use of my right hand—that is how indispensable a digital camera is to my practice. I was simply paralyzed without a camera. We use our digital camera for:

- A basic set of images on all new patients (full face, frontal smile, retracted frontal view, and upper and lower occlusal images)
- A diagnostic series of images for patients in need of restorative dentistry (a series of 20 images that aid in diagnosis and treatment planning)
- Evaluating provisional restorations
- Shade and contour communication to the lab
- Monitoring lumps and bumps
- Postoperative images
- Patient communication
- Marketing
- Educating ourselves and others

I purchased a Nikon D70 and also had my D100 repaired as a backup. I never again want to be a day in practice without a quality digital camera. It is by far the most used and valuable piece of equipment in our office.



Electric Waxer

I love my Kerr electric waxer! Long gone are the days of an open flame and setting my hair on fire—never a good smell with which to infuse the office!

I perform the vast majority of my diagnostic wax-ups for the restorative dentistry I do. I feel waxing up the case aids in my treatment planning as well as my ability to execute the dentistry clinically. Performing the wax-up has not only improved my ability in the area of indirect restorations but also increased my knowledge of tooth shapes, arrangement, and morphology, which translates to improved skill with direct composite restorations and in the refinement of provisional restorations.

The waxer heats up at a moment's notice, and is easy to use, dependable, and portable. I wax at the office but I also pack up my models, articulator, waxer, carver, and a tub of wax, and wax at home in the evenings. Years past, I spent many a night waxing at the kitchen table while my daughters were doing their homework. My daughters are out on their own now, but there are still nights I get home and my husband and I sit and talk while I wax.

In addition to diagnostic protocols, we frequently employ the waxer at the office when a patient breaks a tooth. The assistant takes an impression, pours the impression in quick-set stone and then uses the waxer to restore lost tooth shape before making a matrix in which to make the provisional restoration. It is a customized, fast, and easy technique. An electric waxer is an affordable and indispensable piece of equipment that no office should be without.

Dr. Bakeman is an accredited fellow of the American Academy of Cosmetic Dentistry, an adjunct faculty member of the Kois Center in Seattle, and maintains a full-time private practice in Grand Rapids, Michigan.

“Compared to traditional forms of isolation, such as the rubber dam or manual suction and retraction, Isolite offers significant advantages.

Electric Handpiece

One of the most important changes to my practice in the past 15 years has been the introduction of the electric handpiece. I believe it has allowed me to do better dentistry for many reasons. My preparations are more precise with as a result of the constant torque. This allows me to have better control with the added benefit of less noise and chatter while drilling. The benefits are quite evident when cutting off an e.max® (Ivoclar Vivadent) or zirconia crown.

Microetcher (Intraoral Sandblaster)

I use my microetcher every day I am in practice. I use it for etching all metals, composites, and amalgam for maximum bond strength, especially in emergency repairs. I use it for intraoral porcelain repair, cleaning dark grooves to reveal decay, and removing temporary and or permanent cement. It can be used to remove composite cement from failed bonded restorations, which might allow you to rebond the crown or veneer. It is possible to use your microetcher for prepping pit and fissure restorations as well as small incipient lesions. Couldn't live without it.

Loupes

If there were one item in my practice that I definitely could not live without, it would have to be my loupes. When I was younger I thought that I would never need to use magnification, and then suddenly at 40 I realized I could not see the way I used to. I started with the 2.5 magnifications and now I have to use the 4.8 loupes. I might add I have the micro headlight, which is also a must have for me. I teach at a dental school and we require the students to use magnification for all preclinical and clinical procedures. When a dentist that tells me they don't need to see better, I tell them they are crazy.

Isolite

Compared to traditional forms of isolation, such as the rubber dam or manual suction and retraction, Isolite (Isolite Systems) offers significant advantages. It keeps the working field as dry as a rubber dam, but it is easier and faster. I do a significant number of bonded restorations, and keeping the field dry will improve their longevity. I will say there is a short learning curve with this device, but once you are familiar with the sizing and placement, you will not do a composite without it. I also use it for crown preparation.

Dr. Kugel is dean for research, department of prosthodontics and operative dentistry at Tufts University School of Dental Medicine and editor-in-chief of Inside Dentistry. He is also in private practice in Boston, Massachusetts.

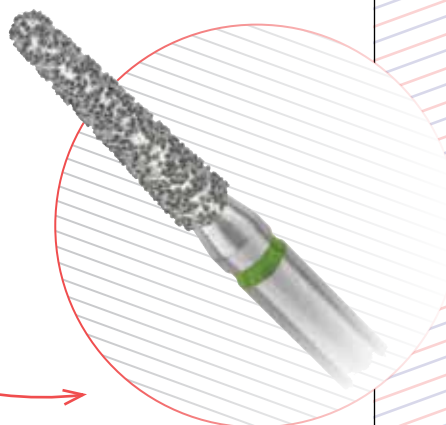


ROBERT MARGEAS, DDS

In my dental practice, there are a number of products I use on a daily basis that if they were taken away from me, I would have a difficult time practicing at the highest level.

Diamond Bur

I need a great diamond bur to prepare my teeth with not only speed and precision, but also without clogging or causing trauma to the tooth. This new diamond bur called DuraBraz from Brasseler hit the market this past year. The spot brazing of the diamond allows more spacing between the crystals and more consistent cutting edges. This allows for minimal clogging and higher cutting performance. The bulk tooth reduction will be smoother and more precise. Used in an electric handpiece, there is no better diamond on the market.



Magnification

Another product that I could not work without are my loupes or dental magnification glasses. I was fortunate to start using magnification right out of dental school and have never looked back. I did not wear magnification throughout my training but saw the benefits at a dental meeting after graduation. I currently use 4.5x expanded field dental telescopes from Designs for Vision. This is a company that has been around for over 50 years, and is known for making the highest quality products. I would encourage all dentists to use magnification and gradually work their way up to the higher power loupes.



Electric Handpiece

The final product that makes my practice efficient and performing at a high level is my electric handpiece. Once again, I was very fortunate to meet Arthur Mateen in 1995 at the Chicago Midwinter Meeting and he convinced me to try the Bien-Air electric handpiece. It was a welcome change to the old air-driven handpiece. I realized they could prepare teeth with high torque without stalling out. **This not only increased my efficiency, but also created precision margins. I love the fact you can dial down the speed so that the final margins can be planed to a very smooth finish.** Having the ability to control the torque also helps with creating surface texturing when finishing composite resins.

Dr. Margeas is an adjunct professor in the department of operative dentistry at the University of Iowa College of Dentistry in Iowa City, Iowa. He is also in private practice in Des Moines, Iowa.

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“Being able to see a photo on a large computer screen gives you an ability to see things from a different perspective than from behind the patient’s head in the chair. I take photos every single day.”



Narrowing it down to three products that I cannot live without is really tough. I have some favorite composites, bonding agents, burs, handpieces, etc, but the truth of the matter is there are many high-quality products on the market from several manufacturers that I can implement into my practice and get predictable results. I looked at this from the perspective of what has changed how I practice and the outcome of what I do. That being said, here are my three “can’t-live-without” products.

Canon 70D Camera

Canon 70D with 100-mm macro lens and 270EX II speed lite. I have had a camera since the day I started practicing dentistry and I cannot imagine life without it. From new patient photos and patient education to diagnosis and treatment planning, lab communication, and esthetics. Being able to see a photo on a large computer screen gives you an ability to see things from a different perspective than from behind the patient’s head in the chair. I take photos every single day.



Almore Shimstock Strip

Unglamorous as it may seem, it also happens to be the one thing that has given me the most predictability when it comes to doing my entire restorative needs. Whether it is doing one-unit restorations, full mouth rehabilitation, or equilibrations, it has decreased the number of postoperative adjustments tremendously. Even the thinnest occlusal paper cannot predictably let you know the difference in intensity and that little bit can make all the difference in some patients.

Hygienic Non-Latex Dental Dam

Again. Basic. Boring even. The truth is I am more efficient and work more effectively when a rubber dam is on. Whether prepping, filling, or seating a case, all of these procedures get a rubber dam in my office. I am not dealing with tongue, cheek, or moisture. Patients are actually more comfortable as well, and my intraoral time decreases significantly. My assistant also prefers to assist with rubber dam on. A plus for me, the patient, and my assistant equals a no-brainer in the practice.

Dr. Seay maintains a private practice in Mount Pleasant, South Carolina. Since graduating from New York University College of Dentistry in 2002, Dr. Seay has continued to expand her base of dental knowledge and skills through continuing education and advanced training. Dr. Seay shares her knowledge as a Kois Clinical Instructor in Seattle. Additionally, she has published articles covering the art and techniques of esthetic dentistry and serves on the boards of several peer-reviewed journals. She was nominated as one the Top 25 Women in Dentistry in 2012 and is an accredited member of the American Academy of Cosmetic Dentistry.

MICHAEL SONICK, DMD, AND RUI MA, DMD

The following are our essential products for the periodontal/surgical practice.

GEM 21S

GEM 21S (Osteohealth) is a growth factor-enhanced matrix consisting of a bioactive protein rhPDGF (recombinant human platelet derived growth factor) and an osteoconductive matrix β -TCP (beta-tricalcium phosphate). One of the main ingredients, PDGF, is an important mediator of wound healing, stimulating chemotactic migration of PDL fibroblasts, cell proliferation, collagen matrix formation, and angiogenesis. GEM 21S has been FDA approved for treating intrabony and furcation periodontal defect as well as gingival recession associated with periodontal defects. It recently has also been shown to increase the rate at which viable bone forms following bone grafting.



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Cut-Trol

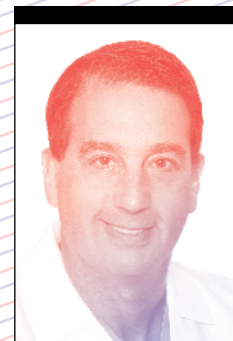
Cut-Trol (KISCO Dental) is a ferric sulfate hemostatic product. It effectively stops bleeding in a short amount of time and is gentle to both hard and soft tissue. To apply, a cotton swab is dipped into the solution and swabbed on the bleeding site or a small amount is drawn into a sterile tuberculin syringe and applied gently. Due to its unique characterizes, Cut-Trol is widely used in many day-to-day dental procedures, such as dental impressions and dental and implant surgeries. It is found to be a very useful adjunct in controlling hemostasis following the palatal harvest of a connective tissue graft.

Piezosurgery

Piezoelectric surgery, or piezosurgery for short, is a process that uses controlled three-dimensional ultrasonic micro-vibration to cut bone tissues. Its unique design and cutting action provide ultimate surgical precision and high intra-operative visibility, while the selective cutting action allows surgeons to cut mineralized tissue while minimizing trauma to the soft tissues. While it is widely used in medical field, piezosurgery also demonstrates its excellent usage in dental surgeries, such as osseous surgery, extraction and ridge augmentation, bone graft harvesting and sinus surgery.

Dr. Michael Sonick is a full-time practicing periodontist and implant surgeon in Fairfield, Connecticut. He currently is a guest lecturer at New York University School of Dentistry and the University of Connecticut School Of Dental Medicine. He is on numerous editorial boards and is co-editor of the textbook Implant Site Development.

Dr. Rui Ma is a full-time practicing periodontist and implant surgeon in Fairfield, Connecticut. He attended the State University of New York in Albany where he attained a bachelor of science in Chemistry. He continued at Tufts University to complete his dental degree. He completed his periodontal residency at Stony Brook University.



“My first thought for ‘Must Haves’ in my practice was my office administrators, dental hygienists, and clinical assistants. In terms of products that I consider invaluable in my clinical work, here are three—two old and one new—that I consider very important.”



Vitrebond Plus Base Liner

Vitrebond Plus Base Liner (3M ESPE) is a resin-modified glass-ionomer cement that was first introduced as Vitrabond in the late 1980s and renamed Vitrebond, soon after. It is a splendid direct-application dentin replacement material and has proven itself to be invaluable in direct-application stratification tooth repair. This material chemically bonds to tooth structure, releases fluoride ions which have an internal antibacterial effect, reduces microleakage significantly, and in my experience of more than 25 years using the product, eliminates all postoperative tooth sensitivity. I consider Vitrebond Plus indispensable for dentin replacement in direct-application adhesively bonded tooth repair.

Enamelon Preventive Treatment Gel

Enamelon Preventive Treatment Gel (Premier Dental Products) is a new, nonprescription, stannous fluoride brush-on preventive product containing calcium and phosphate salts that has shown good early acceptance by patients and parents. New research has shown that with a significantly lower fluoride concentration and amorphous calcium phosphate technology to enhance remineralization, the pleasant-tasting gel gives much better fluoride uptake and resistance of enamel surfaces to acid challenge than sodium fluoride prescription dentifrices. Even though it is new to the marketplace, the initial research is extremely promising as to its potential to protect against caries, decrease sensitivity of dentin, and reduce gingivitis. It may be premature to designate this remarkable gel as a long-term “must have” in my practice, but these remarkable attributes do not appear to be accompanied by any disadvantages.



Preformed Stainless Steel Crowns

Preformed stainless steel crowns (3M ESPE) are indispensable to pediatric dentists and general dentists who treat children. These crown forms, with wide variation in sizes, have been developed with high-quality stainless steel and closely replicate the anatomic design of natural teeth. When tooth preparation of a primary molar is proper and a stainless steel crown form is adapted and luted correctly, occlusion, masticatory function, and spatial relationships are regained, with a virtual guarantee that caries will no longer affect the treated tooth. In addition, the permanent molar crown forms, also by 3M ESPE, are ideal for interim full coronal coverage of permanent molars until long-term repair with precision cast metal or ceramic crowns can be considered in the adult years. Many permanent posterior teeth that are designated for extraction due to severity of damage or financial considerations could be saved with judicious use of these permanent molar crown forms. Severely hypoplastic or hypocalcified permanent first and second molars can also be restored for extended periods of time with the 3M ESPE stainless steel crowns.

Dr. Croll is a diplomate of the American Board of Pediatric Dentistry, practicing in Doylestown, Pennsylvania, since 1978. Currently, he serves as adjunctive clinical professor of pediatric dentistry at the University of Texas Health Science Center in San Antonio, Texas, and affiliate professor of pediatric dentistry at University of Washington School of Dentistry (Seattle). Dr. Croll has no current financial interest in the products or companies mentioned in this writing.

In Search of Must Haves

THE TOP 5 most viewed products on InsideDentalProducts.com in each category.

+ ADHESIVES/BONDING

PRODUCT	COMPANY
ALL-BOND UNIVERSAL	BISCO
Brush&Bond	Parkell
BeautiBond	Shofu
Bond	Heraeus Kulzer
Adhese Universal	Ivoclar Vivadent Inc.

+ BURS/DIAMONDS

PRODUCT	COMPANY
Peter Brasseler Series Diamonds	Brasseler
Dialite Diamonds	Brasseler
Winter Restorative Design Prep Kit	Brasseler
KOMET ZR-Diamonds	Komet
DuraBraze	Brasseler

+ COMPOSITES

PRODUCT	COMPANY
TheraCal LC	BISCO
HRi	Synca
SonicFill	Kerr
BEAUTIFIL Flow Plus	Shofu
Filtek Dental Restorative	3M ESPE

+ CEMENT

PRODUCT	COMPANY
eCEMENT	BISCO
BisCEM	BISCO
MonoCem	Shofu
Duo-Link Universal	BISCO
BeautiCem	Shofu

+ CAD/CAM EQUIPMENT

PRODUCT	COMPANY
CEREC AC w/ Omnicam	Sirona
CAM 5-S1	VHF
Planmeca PlanScan	E4D
OneVisit	Benco
CEREC MC XL	Sirona

+ DIAGNOSTIC EQUIPMENT/ACCESSORIES

PRODUCT	COMPANY
Fingertip Pulse Oximeter	Henry Schein
T-Scan	Tekscan
Massad DEFSR	Nobilium
CariVu	DEXIS
MicroLux - Fiber Optic Perio Probe	AdDent

+ DIGITAL IMAGING: INTRAORAL SENSORS

PRODUCT	COMPANY
Smile Designer Pro	Tasty Tech
Schick 33	Schick
Sensibles	Flow Dental
AimRight	Schick
NOMAD Pro 2	NOMAD

+ DIGITAL IMAGING: PANORAMIC X-RAY

PRODUCT	COMPANY
Orthopantomograph OP30	Instrumentarium
SCANORA 3Dx	SOREDEX
Bel-Cypher Digital Panoramic X-ray	Belmont Equipment
CS 9300	Carestream Dental
Hyperion X9	MyRay

+ ENDODONTICS

PRODUCT	COMPANY
EndoSequence RRM	Brasseler
EndoSequence BC Sealer	Brasseler
EndoSequence 2 Cordless	Brasseler
Foramatron	Parkell
BioRaCe	Brasseler

+ HANDPIECES

PRODUCT	COMPANY
Forza L50K Lab Motor	Brasseler
Sterling High Speed Fiber Optic	Benco Dental
StarDental 430 Series	DentalEZ Dental
Accclean Hygienist Handpiece	Henry Schein
Forza ELM	Brasseler

+ IMPLANTS

PRODUCT	COMPANY
NobelActive	Nobel
AnyRidge Implant System	IDS
Implant Abutment System	Rhein83
SMARTbuilder	Hiossen
3D Click Guide	Idondivi, Inc

+ IMPRESSION MATERIALS/ACCESSORIES

PRODUCT	COMPANY
Blu-Bite HP	Henry Schein
Affinity	Clinician's Choice
Cinch VPS	Parkell
FlexiTime	Heraeus Kulzer
Alginate Impression Material	Harry J. Bosworth

+ PRACTICE/BUSINESS MANAGEMENT TOOLS

PRODUCT	COMPANY
iDentalSoft	iServiceSoft
1-800-Dentist	FutureDontics
Axex Dental	UniDent Software Co.
FireCR Dental Reader	3DISC Imaging
Aquarium Software	Dolphin Imaging