

THE DENTAL ADVISOR™

Improving Patient Care Through Research & Education



Infection Control

Hand Hygiene: Principles and Effective Strategies

Hand hygiene is important in dental treatment settings by affording protection for both patients and dental professionals, even though treatment providers wear gloves for every procedure. Organisms on a clinician's hands may be transferred to the patient's mucous membranes or into the patient's bloodstream via injection sites and openings in gingival tissue during dental treatment. Similarly, workers that touch contaminated tissues and body fluids can transfer infectious agents to themselves when touching their mouth, nose, eyes, or cuts and scrapes on otherwise intact skin.

This issue of THE DENTAL ADVISOR discusses the importance of hand hygiene, the products available to the dental community, and what to consider when choosing what product works best for you.

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RATINGS:

Excellent + + + + +
Very Good + + + +
Good + + +

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From the Desk of *John Molinari and Peri Nelson*



Adherence to effective infection control practices and protocols by health professionals has been shown to protect both care providers and their patients alike. Of all of the components within a complete infection control program, the principles and practices associated with hand hygiene remain the most fundamental and frequently used. Despite its importance, however, examples of misperception and confusion continue to be noted. For example, questions relating to the effectiveness of washing hands versus waterless alcohol preparations and potential dermatitis problems are common. The introduction of alcohol-based, waterless antiseptics has also fostered numerous inquiries about product properties related to cleaning, anti-microbial spectrum, and residual activity.

The following article explores the importance of hand hygiene, the types of products available, and what to consider when purchasing supplies for your practice.

Please contact us with questions, comments or concerns at jmolinari@dentaladvisor.com or pnelson@dentaladvisor.com.

Introduction

Infection prevention involves utilization of aseptic technique principles and procedures. Routine hand hygiene practices using both hand washing procedures and waterless, alcohol-based hand antiseptics provide applications of these basic principles. It must be noted here that the introduction of the class of waterless preparations resulted in a terminology change.

What used to be termed “hand washing” is now called “hand hygiene.”

Hand hygiene is critical to the success of an infection control program. Its significance cannot be understated, as it continues to be the single most important measure health care professionals (HCP) can use to prevent cross-contamination and cross-infection in clinical settings. The earliest evidence supporting this fact can be found in the hospital-based studies of Semmelweis, Holmes, and others in the mid - 1800s. They linked observed improvement in clinical hand washing procedures with a resultant decline in nosocomial patient infections. These pioneering investigations laid the foundation for current hand hygiene technologies and innovations.

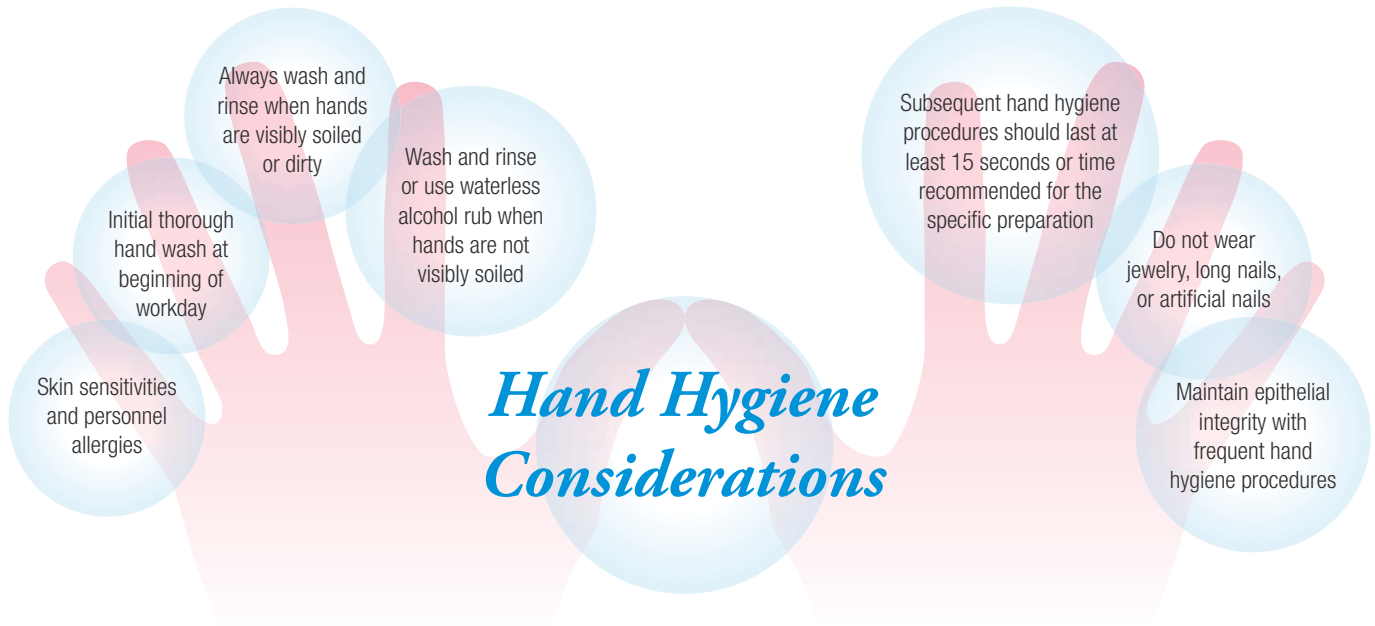
The Centers for Disease Control and Prevention (CDC) periodically issues specific guidelines for hand hygiene. The most recent, comprehensive update is the 2002 Guideline for Hand Hygiene in Health-Care Settings, and applies to workers in all professional facilities. Similar recommendations were included in the 2003 CDC Guidelines for Infection Control in Dental Health-Care Settings:

“Perform hand hygiene with either a non-antimicrobial or antimicrobial soap and water when hands are visibly dirty or contaminated with blood or other potentially infectious material. If hands are not visibly soiled, an alcohol-based hand rub can also be used. Follow the manufacturer’s instructions.”

These guidelines succinctly summarize both the basic principle regarding cleaning, as well as inclusion of the more recent waterless hand hygiene innovations.

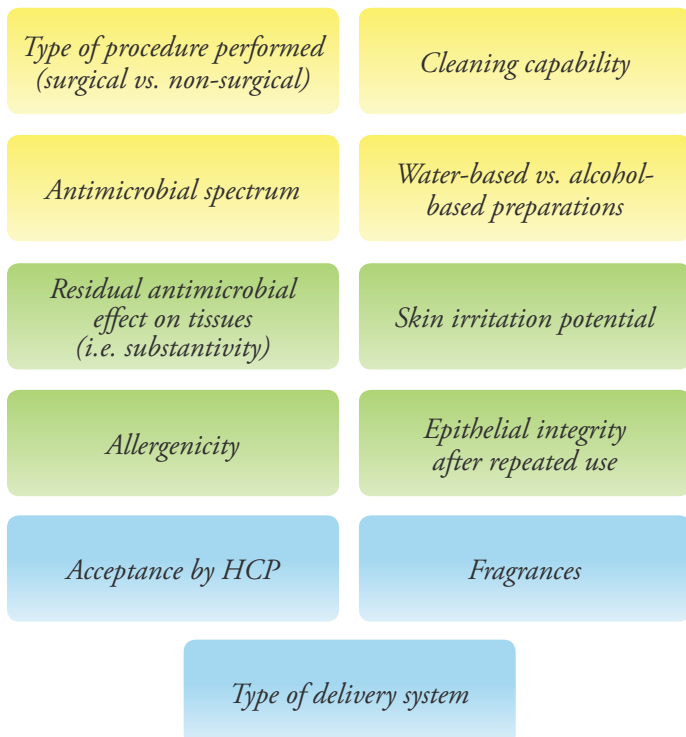
Hand Washing and Hygiene Considerations

The primary purpose of washing is to remove microorganisms from the skin, thereby minimizing the potential for cross-contamination and cross-infection from contaminated hands. Even with the availability of numerous water-based and waterless preparations, basic considerations for proper hand hygiene should be applied.



Many products are available to accomplish the basic goals of hand cleaning and antisepsis. A few important features to consider for product selection are found below.

Representative Hand Hygiene Product Features



Clinical Tip

A variety of fragrances are found in many products that are designed for occasional, personal use during the day. While these scents may be pleasant smelling, strong scents can adversely affect people with sensitive skin and/or allergies to perfumes, laundry detergents, etc. Frequent use of heavily scented agents can cause either onset of non-specific irritation dermatitis or allergic contact dermatitis, especially in health care facilities where numerous hand hygiene procedures are performed each day. Suggestions here are to use hand hygiene products that have been developed and tested for health care facilities and also to consider using preparations that are not heavily scented.

Hand Hygiene Product Classification

An evaluation should initially look at product choices based on the treatment procedures performed and level of anticipated exposure. Surgical procedures require a much higher level of antimicrobial activity than those classified as non-surgical. The majority of routine procedures performed in a dental practice are typically non-surgical, and clinicians have four acceptable choices when performing non-surgical procedures: 1) non-antimicrobial liquid soap and water; 2) antimicrobial soap and water; 3) waterless high alcohol-based hand antiseptics for use on non-soiled hands; and 4) non-alcohol based, non-rinse preparations.

1.

Non-antimicrobial Liquid Soap and Water

A non-antimicrobial liquid soap is adequate when washing hands to remove bioburden and transient microorganisms from epithelial tissues. It is able to accomplish a basic infection control precept - *clean first*. These formulations are typically less irritating than antimicrobial antiseptics and are very economical. When hand washing is performed properly, 97% or more of surface debris can be removed. For those HCPs with sensitive skin it is also important to consider that a non-antimicrobial soap should contain ingredients that can minimize skin irritation and drying.

Products that contain emollients assist in moisturizing tissues and thus, help preserve epithelial integrity with repeated hand washing (*Hand Essentials Lotion Soap, Hu-Friedy; VioNexus Foaming Soap, Kerr Total Care/Metrex*).

2.

Antimicrobial Soap and Water

Most HCPs routinely use antimicrobial antiseptics to wash their hands. The U.S. Food and Drug Administration (FDA) Division of Over-The-Counter Drug Products is responsible for regulation of antiseptics intended for use by HCPs. Optimal features to consider include: whether a product has a broad antimicrobial spectrum, is fast acting on tissues, and exhibits persistent activity (i.e., substantivity). The three most commonly used antimicrobial agents include: chlorhexidine gluconate, chlorometaxlylenol and triclosan. The table below provides a list of representative products utilizing the different antimicrobial agents.

Available antimicrobial soaps listed by active ingredient

Chlorhexidine Gluconate	Chlorometaxlylenol	Triclosan
<i>Hibiclens Antiseptic / Antimicrobial Skin Clean (Mölnlycke Heath Care)</i>	<i>VioNex Antimicrobial Liquid Soap (Kerr TotalCare/Metrex)</i>	<i>Hand Essentials Antibacterial Soap (Hu-Friedy, Inc.)</i>
<i>Saniclenz Antimicrobial Skin Cleanser (Crosstex)</i>	<i>Aloe Guard Antimicrobial Soap (Healthlink)</i>	<i>Moist Sure Lotion Soap (Sultan HealthCare)</i>
<i>Excelle Chlorhexidine Foam Soap (Certol International)</i>	<i>Medi-Scrub Antimicrobial Handwash (Ecolab)</i>	<i>Bacti-Stat Antimicrobial Handwash (Ecolab)</i>
<i>3M ESPE Avagard Antiseptic Surgical Hand Scrub (3M ESPE)</i>		

3.

Waterless High Alcohol-based Hand Antiseptics For Use on Non-Soiled Hands

The CDC, APIC (Association for Professionals in Infection Control), and other organizations recommend alcohol based hand hygiene products (i.e., preparations containing 60 - 95% ethyl or isopropyl alcohol) as a preferred option for routine use on hands that are not visibly soiled. The chemistry of alcohols serves to enhance their microbicidal spectrum to include a wide range of bacteria and viruses. Alcohol based hand rubs have been shown to be highly effective in improving hand hygiene compliance.

Alcohol based sanitizers are available as low viscosity rinses, gels, and foams for use in healthcare settings. Even though alcohol sanitizers are among the safest antiseptics, some formulations can still cause dryness and skin irritation. When evaluating products in this category, consideration should always include those preparations tested and approved for frequent use in health care. They should also contain sufficient concentrations of emollients to increase skin hydration and prevent skin damage, thereby minimizing the potential for irritation dermatitis. Products in this category include: **Moist Sure Liquid Hand Sanitizer**, Sultan HealthCare; **Sterillium Comfort Gel**, Hu-Friedy; **Sanityze Waterless Moisturizing Antimicrobial Hand Sanitizer**, Crosstex; **Vionexus No Rinse Spray**, Kerr TotalCare/Metrex; **3M ESPE Avagard D Instant Hand Antiseptic**, 3M ESPE; **Moist Sure Foaming Hand Sanitizer**, Sultan HealthCare; **GBG AloeGel Instant Hand Sanitizer**, Healthlink; **Quik-Care**, Ecolab; **Monarch Hydrating Instant Hand Sanitizer**, Air Techniques; **HurriSept Antiseptic Hand Gel**, Beutlich Pharmaceuticals.

GBG AloeGel Instant Hand Sanitizer

HealthLink /
Clorox Healthcare
(800) 638-2625
www.healthlinkinc.net



Product Description: Specially created for people in healthcare, *HealthLink® Hand Care* products contain aloe vera. They moisturize and prevent drying — bringing relief to hands that are washed and treated with hand sanitizer all day long. **GBG AloeGel® Instant Hand Sanitizer** kills 99.9% of germs without sticky residue.

3M ESPE Avagard D Instant Hand Antiseptic

3M ESPE
(800) 634-2249
www.3mespe.com



Product Description: **3M ESPE Avagard D Instant Hand Antiseptic** provides rapid bactericidal action against a broad spectrum of microorganisms and helps maintain the skin's integrity and prevents skin breakdown. It contains 61% w/w ethyl alcohol in a moisturizing base and meets the CDC Guideline for "Hand Hygiene in Healthcare Settings. Its unique, rich emollient base feels smooth on hands, but doesn't leave hands sticky or impact glove performance. It is quick and easy to use, and fits easily within the dental professional work environment. **3M ESPE Avagard D Instant Hand Antiseptic** comes in a 16 fl oz (500 mL) pump bottle.

4.

Non-Alcohol Based, Non-Rinse

Non-alcohol, non-rinse antiseptics, represent a new category of hand hygiene products. This type of product provides an alternative for those who have exhibited problems with prolonged use of the high-alcohol based antiseptics. In this category, THE DENTAL ADVISOR recommends **HY5** (*Productive Practices*).

Q: Are the waterless antiseptic preparations effective?

A:

They work if hands are not dirty or contaminated with body fluids such as saliva, blood, or exudate. When hands are not visibly soiled, waterless hand hygiene agents are useful and effective as alternatives to traditional hand washing with liquid soaps or antiseptics. If hands are visibly soiled, then only soap and water or antiseptic hand washes with water should be used. The use of waterless hand hygiene agents has been shown to be effective in a number of health professional settings in part because they have fostered an increase in compliance. Accumulated data have shown that increased compliance is translated into lower hospital-acquired infection rates. However, there is a note of caution that also must be included. If a person has dry skin, these agents may further the problem. Many of the newer products contain emollients such as glycerin and aloe vera, which help moisturize the epithelium and reduce dryness and cracking.

Dermatitis Related to Hand Hygiene

Healthy, intact skin is the primary barrier against infection. Skin damage changes the micro flora, resulting in more frequent colonization by transient bacteria that can cause dermal infections. The physical act of washing hands can remove surface lipids, fatty acids, and other skin components that lubricate epithelium. Frequent repeated use of hand hygiene agents, especially soaps and detergents, has been associated with irritant dermatitis among HCPs, most frequently those reporting a history of skin problems.



The degree of skin irritation can vary considerably and can be reduced substantially by choosing hand hygiene products with emollients and using appropriate hand lotions designed for health professional use that reduce dryness. Antimicrobials in products can also contribute to onset of non-specific or allergic dermatitis. Even alcohols that are among the safest antiseptics can still cause drying and skin irritation for certain people. Maintenance of epithelial integrity should therefore be included as an important component in any hand hygiene regimen.

Water-based lotions are often recommended to ease the dryness resulting from frequent hand washing, moisturize tissues, and to prevent dermatitis resulting from hand perspiration during extended glove use. (*Septodont Hand Cream, Septodont; Glove Relief, SultanHealthCare; Hand Essentials Skin Repair Cream, Hu-Friedy; Hand Essential Moisturizing Lotion, Hu-Friedy; Monarch Revitalizing Hand Lotion, Air Techniques; Glove-N Care, Essential Dental Systems; AloeSoothe Moisturizing Lotion, Healthlink*).

Hand Essentials Skin Repair Cream

Hu-Friedy
(800) 483-7433
www.hu-friedy.com



Product Description: Hand Essentials Skin Repair Cream is scientifically proven to moisturize and repair damaged skin to help restore its natural moisture balance. A patented blend of ingredients, *Olivamine*[®], delivers all of the essential nutrients necessary for optimal skin health including amino acids, vitamins B3 and B6, antioxidants, and methylsulfonylmethane (MSM). Natural moisture-retaining oils, aloe vera, and dimethicone leave the skin feeling silky with no greasy residue. Indicated for all dental health care professionals, particularly those who are at high risk for skin breakdown due to frequent washing.

Q: What are the symptoms of nonspecific dermatitis?

A: The hands become reddened, dried, cracked, and may even bleed in severe instances. After washing hands 25 to 30 times a day, they can become dry. This occurs when moisture is not replaced with a water-based type of emollient, when the hands are not dried properly, and/or when soap residue is left. When the hand wash agent is not properly rinsed from an existing site of irritation, the wounded area holds the soap more tenaciously. Thus, an important component of hand washing requires that any area of dermatitis be rinsed even better than the rest of the hand.

Summary

There are important roles for use of both water-based and waterless hand hygiene formulations. Both selection of hand hygiene products and compliance require evaluation of a number of factors that can affect routine infection control practices. Products that are able to minimize potential problems for HCP's serve to promote high professional hand hygiene standards and are encouraged to be used frequently.

Instrument Cassettes: Effective and Safe

John A. Molinari, Ph.D. and Peri Nelson, B.S. | Dental Consultants, Inc., Ann Arbor, Michigan

A primary infection control goal for health care is to provide sterile instruments for patient treatment. At the same time it is important to remember that the basic tenet of the 1991 Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens Standard also remains applicable, that is, employers should provide a safe working environment to reduce the risk of occupational injury by their employees. While instrument sterilization remains the end point, consideration should be given to technologies and products that minimize risk during the multiple steps involved in instrument reprocessing. Fortunately, today's clinicians have a variety of acceptable options from which to choose.

The introduction of cassettes into dental clinics in the 1980's signaled an important shift from earlier instrument cleaning practices by offering an alternative approach for reprocessing instruments. A major reason for incorporating these instrument containers into clinical practice was that they allowed personnel to handle contaminated items much less frequently, thereby preventing many of the sharps exposures encountered during hand scrubbing, drying, sorting, and packaging of instruments. A number of other inherent advantages have also been observed with cassette use (Table 1). In brief, cassettes provide benefits of efficiency and organization. As a result, their presence in clinical settings has expanded rapidly and cassettes are now routinely found within most dental academic programs, as well as in a rapidly increasing number of practices.

While instrument sterilization remains the end point, consideration should be given to technologies and products that minimize risk during the multiple steps involved in instrument reprocessing. Fortunately, today's clinicians have a variety of acceptable options from which to choose.

The structure, design, and appearance of cassettes have continued to evolve. While the role of a cassette is still centers around efficient, safe instrument reprocessing, recent modifications have attempted to further improve function by considering additional "ideal" design characteristics (Table 2). The latest generation of dental instrument cassettes (*IMS Infinity Series™ Cassettes*, *Hu-Friedy® Mfg. Co., LLC*) has incorporated a number of these cutting edge design features in order to maximize infection control performance (Fig. 1). Some are immediately noticeable, such as an increased vented pattern area. Increasing the size of these open access portals can allow for enhanced instrument cleaning and rinsing in preparation for sterilization. This feature has even been extended to the narrow sides of the cassette, in contrast to earlier resin and stainless steel models which contained few vents for cleaning solution access to soiled instruments (Figure 2). Inspection of the silicone rails where instruments are seated also reveals subtle changes. They are smaller than previous holders, thus lessening the contact area with instruments. In addition to holding instruments firmly in place during cleaning cycles, rails should have minimal contact with instruments to allow detergents and water optimal access to surfaces.

The main function of cassettes remains augmenting the effectiveness of instrument reprocessing and studies were therefore undertaken to evaluate *Infinity Series Cassettes*. An Artificial Test Soil (ATS) (*Healthmark Industries Company, Inc.*) formulation was used as the test organic debris.

Table 1. Instrument Cassette Advantages

Time Savings	One cassette holds all instruments for a specific procedure together from chairside procedure through reprocessing while eliminating certain manual steps from the process
Improved Safety	Minimized handling of contaminated instruments during processing for re-use, which decreases chances of sharps injuries
Better Organization	Standardized procedures that are color coded for easy identification and organization
Decreased Contamination Potential	Proper spacing of instruments during reprocessing provides optimal environment for cleaning and sterilization
Streamlined Workflow	Promotes proper flow of dirty to clean during instrument reprocessing. Easy break down after patient appointment and simple patient prep.
Increased Instrument Longevity	Protects instruments from damage during reprocessing while keeping them in place from chairside to storage to reduce the possibility of misplaced instruments.

Figure 1. Infinity Series Cassette



This proteinaceous material is routinely used as a standard challenge for cleaning heat-stable items prior to sterilization. The protein content of the ATS was further enhanced by adding whole blood (4:1 ATS: blood ratio) to the suspension before instruments were coated. This mixture therefore provided an experimental “worst case” scenario for removal of biological debris.

Representative dental instruments were selected to evaluate the performance of the cassettes during removal of dried organic debris in a **Midmark 250** (*Midmark*) ultrasonic unit using a 10 minute cycle. Freshly prepared solutions

of **Enzymax® Ultrasonic Detergent** (*Hu-Friedy Mfg. Co., LLC*) were used as the cleaning agent. Thirty (30) dental scalers and twenty (20) periodontal probes (*Hu-Friedy Mfg, Inc.*) were immersed in and coated with modified ATS prior to loading into **Infinity Series Cassettes**. It is important to note here that the amount of dried debris on instrument and cassette surfaces was far greater than what would be encountered in clinical settings. Soiled instruments and cassettes were subsequently placed in a 60 C laboratory oven and allowed to dry for 2 hours (Figure 3). Ultrasonic cleaning tests were performed in duplicate. At the conclusion of each cycle instruments, rails, and other cassette components were visually inspected for the presence of remaining organic debris. As shown in Figure 4, biological debris was not found on any of the previously contaminated scalers and probes. Visual observation of rails and other cassette surfaces also revealed an absence of debris (Figures 5 and 6).

SUMMARY

*Incorporation of cassettes into an infection control program should provide the benefits of enhanced and safer cleaning of contaminated items during instrument reprocessing. The findings described above indicate that the design of **Infinity Series** cassettes can facilitate removal of heavy soil on instrument surfaces. Their integration into a dental facility can serve as a valuable addition to an infection control program. +*

Table 2. Representative “Ideal” Features for Instrument Cassettes

Characteristic	Function
1. Large vented surface areas	Maximize instrument cleaning, rinsing, and drainage in ultrasonic units and washers/disinfectors
2. Compatible with today’s cleaning equipment, including automated washers	Better drainage and access to hard to reach areas of the instruments.
3. Rail design with minimum contact but holds instruments in place	Maximize cleaning, rinsing and drainage of instrument surfaces seated on cassette rails
4. Soft, sturdy material for rails	Prevent instrument damage during processing
5. Light weight construction	Easier to handle when full; increases safety and ease of use; Decreased opportunity to overload reprocessing equipment.
6. High quality stainless steel for metal cassettes	Minimize corrosion over time; extends cassette life
7. Accessory area for additional treatment items (i.e. bur blocks, syringes, hemostats)	Allows for complete procedure set-up in one place
8. Ergonomic, user-intuitive latch design	Provides secure single-handed opening and visual indication that cassette is in locked position

Figure 2. Side view of closed Infinity Series cassette. Note the presence of numerous holes designed to enhance instrument cleaning.

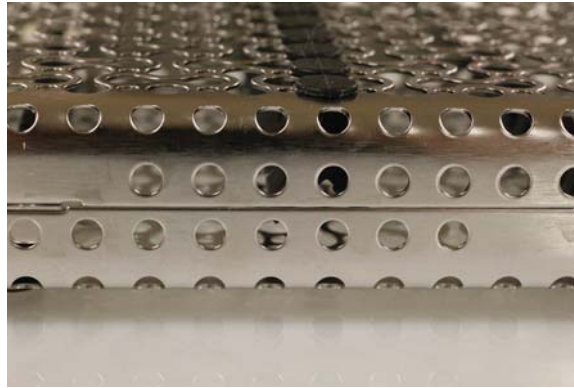


Figure 3. Dental scalers and periodontal probes with dried organic debris in an Infinity Series cassette before ultrasonic cleaning.

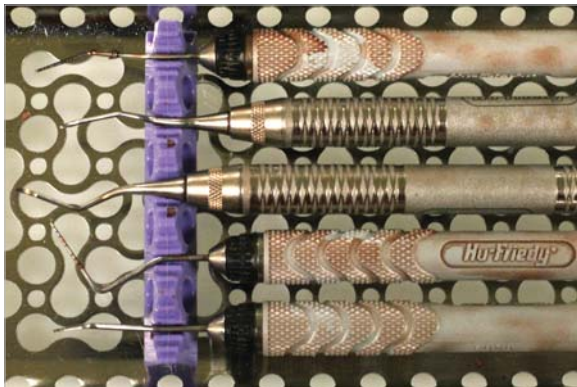


Figure 4. Cleaned instruments after a single 10 minute ultrasonic cycle.

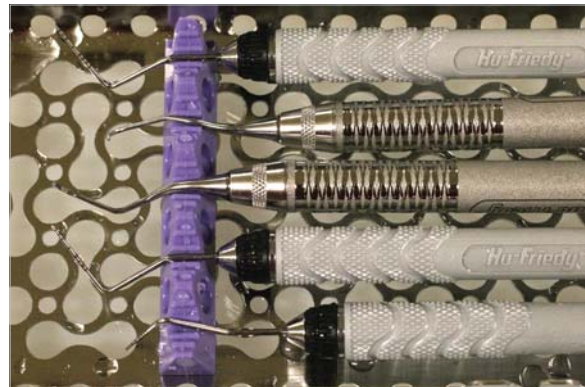
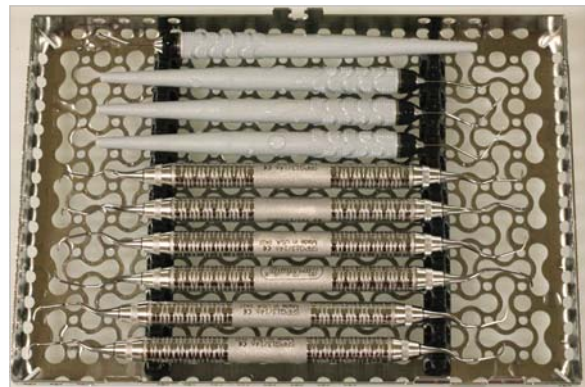


Figure 5. Appearance of Infinity cassette rails after cleaning of heavily soiled instruments. No evidence of any residual soil could be detected.



Figure 6. Cleaned instruments in an Infinity cassette. Note the complete absence of any visible soil on instrument and cassette surfaces.



Young Hygiene Handpiece

Young Dental

www.youngdental.com



Description

The **Young™ Hygiene Handpiece** is designed to fit the contours of the hygienist's hand, delivering the ergonomic comfort and control necessary during polishing. A contra-angled on the connector attaches the handpiece to the tubing at a 45° angle, minimizing drag. The **Young Hygiene Handpiece** is constructed with a Reverse Radius™ silhouette, which is curved rather than straight to fit the clinician's hand. The engraved matte grip rotates 360°, reducing the need to shift during polishing. The handpiece nosecone and motor detach into two pieces. Prior to sterilization, the collet can be cleared of any debris when necessary, and the handpiece should be lubricated. The **Young Hygiene Handpiece** is made in the USA and has a two-year warranty. The **Young Hygiene Handpiece** was evaluated by 44 consultants in 2043 uses. This hygiene handpiece received a 96% clinical rating.

Suggested Retail Cost \$700.35/handpiece

Product Features

The **Young Hygiene Handpiece** is lightweight and has excellent ergonomics. Dental hygienists noted decreased hand fatigue, as the angled connector kept the tubing in a more passive position. For some users, a period of acclimation was necessary to find the proper hand position, and some would have liked a slightly longer handpiece. The swivel rotates freely once users find the correct position related to the connector angle. The **Young Hygiene Handpiece** runs smoothly and quietly. Disposable prophylaxis angles are easy to install and remove, yet remain stable during operation. The matte finish provides good grip and is easy to clean.

Consultants' Comments

"Best torque, balance and ergonomic design of all prophylaxis handpieces on the market."

"The most comfortable handpiece I have used."

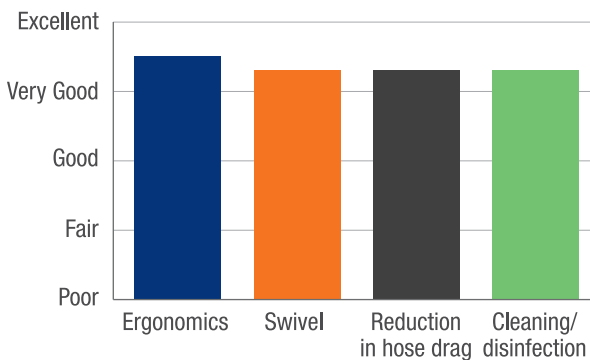
"I loved the way this handpiece moved with me. I didn't feel like I was pulling on my tubing."

"Runs smoothly."

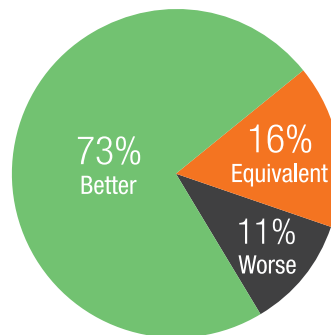
Clinical Tip

Use the **Young Hygiene Handpiece** with disposable prophylaxis angles. ■

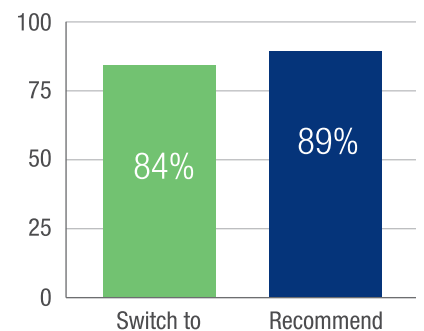
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:



Cavex Bite&White ExSense

Cavex Holland BV

+31 (0)23 530 77 00

www.cavex.nl

Description

Cavex Bite&White ExSense is a tooth conditioner designed to deliver relief for sensitive teeth, especially post-whitening. **Cavex Bite&White ExSense** is a combination of hydroxyapatite, potassium nitrate and hydro-dispersing clay that promotes deep penetration of the hydroxyapatite into the tubuli and micro-cracks of the enamel. As the micro-cracks and tubuli are sealed off, a crystallization process aids in restoring hardness and re-mineralization. **Cavex Bite&White ExSense** can be applied utilizing a custom tray for 10 minutes or more locally, utilizing a fingertip. Patients should not eat or drink for 30 minutes after application. **Cavex Bite&White ExSense** is supplied in a 50 g tube and has a mild mint flavor. **Cavex Bite&White ExSense** was evaluated by 20 consultants in 284 uses. This desensitizing and remineralizing gel received an 86% clinical rating.

Suggested Retail Cost

\$11,99 /tube

Product Features

Cavex Bite&White ExSense gel is easy to apply and effective for desensitizing teeth. It can be used in the dental office and/or dispensed for at-home use. While it was originally developed for use in conjunction with tooth whitening, dentists found it effective for generalized sensitivity and remineralization. Based on a survey of patients who rated their sensitivity before and after use, an average reduction in sensitivity of 40% was observed. Because a 10-minute application is recommended, dentists prefer to supply custom trays to their patients. Patients found the mint flavor to be mild, and some asked for a stronger flavor. Many patients enjoy having flavor choices for their products and asked for more options.

Clinical Tip

Cavex Bite&White ExSense can be placed in the manufacturer's **Cavex Boil&Bite** tray or the patient's whitening trays or retainers. ■

++++



Consultants' Comments

"Noticeable reduction in sensitivity."

"Pleasant, mild flavor."

"After braces come off, we give **Cavex Bite&White ExSense** to our patients to use in their retainers to promote remineralization."

"Smooth consistency."

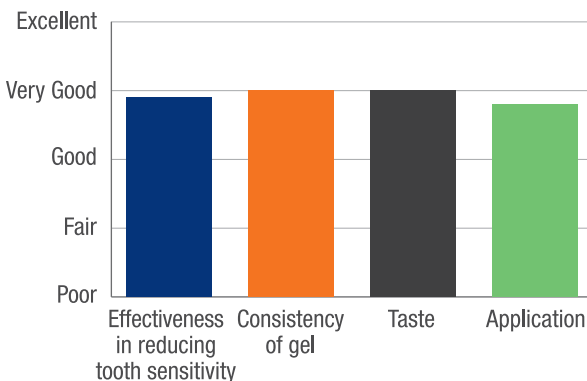
"When I applied **Cavex Bite&White ExSense** after periodontal therapy, I found my patients had a significant reduction in post-operative sensitivity."

"Custom tray is more comfortable than the boil-and-bite tray."

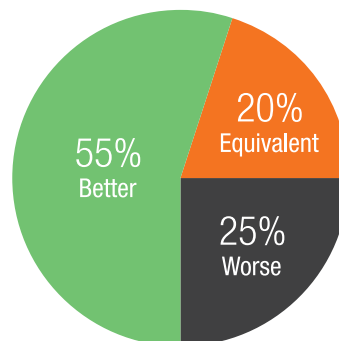
"Add brief instructions on the tube."

"Additional flavors would be a benefit."

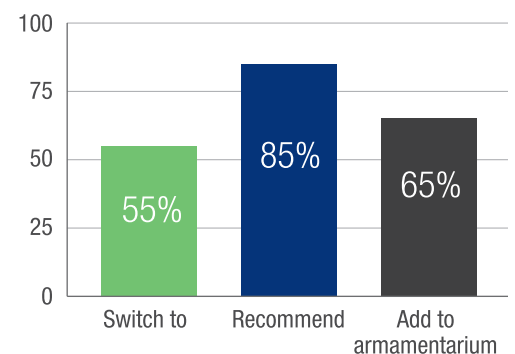
Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:





Tab-a-Bib and Duo-Tab-Bib

++++ 1/2

Edalu Products

(855) -493-7287

www.edaluproducts.com

Description

Tab-a-Bib and **Duo-Tab-Bib** are disposable patient napkins with integrated neck straps. They are designed to eliminate cross contamination associated with utilizing a bib chain. The upper edge of the bib is perforated, which, once separated, becomes the neck strap. The bib is secured through self-adhesive tabs. **Tab-a-Bib** and **Duo-Tab-Bib** both provide two layers of light blue tissue and one layer of poly. **Tab-a-Bib** is 19" x 15" and includes a single strap that wraps behind the patient's neck and is adhered to the opposite side of the bib. **Duo-Tab-Bib** is 22" x 15" and utilizes a perforated strap and adhesive tab on each side. The straps may be adhered to each other or to the patient's clothing. **Tab-a-Bib** and **Duo-Tab-Bib** are optimally secured when attached to poly (back) side of bib. **Tab-a-Bib** and **Duo-Tab-Bib** were evaluated by 20 consultants in 478 uses. This patient napkin received a 91% clinical rating.



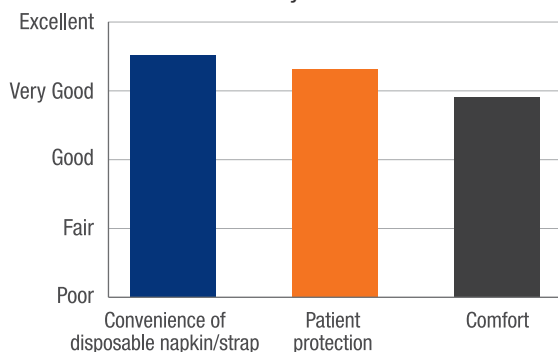
Consultants' Comments

- "One less item to sterilize—with no additional waste."
- "More comfortable to patients than a cold neck chain."
- "No more searching for a bib clip!"
- "A curved, bib-shape would provide more coverage over patients' shoulders."
- "Make the adhesive tab cover easier to peel off."
- "Because bib chains are not needed, this eliminates the risk of harboring bacteria from previous patients"

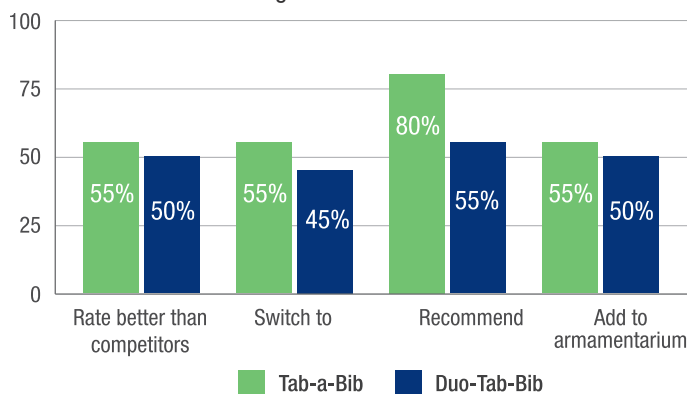
Product Features

Ninety-five percent of consultants stated that **Tab-a-Bib** and **Duo-Tab-Bib** were valuable as a means of infection control by eliminating bib chains or holders. Both sizes provided very good protection, and the **Duo-Tab-Bib** had the added advantage of creating collar-like coverage over the neck. Its larger size was preferred by many consultants. **Tab-a-Bib** was a better fit for children and smaller adults. The cover over the adhesive was not always easy to peel off with gloved hands. Dental assistants and hygienists appreciated eliminating the bib chain from their procedure set-ups. The integrated strap was efficient and comfortable for patients. ■

Key Features:



Percentage of Consultants Who Would:



SPECIAL THANKS TO:

Select Senior Clinical Consultants (Over 20 years):

J. Amara, CT · R. Fisher, OH · W. Gregory, MI · E. Katkow, MD · J. Lockwood, MI · J. Mayer, OH · W. Nagy, TX · G. Poy, MI · J. Shamraj, MI · R. Trushkowsky, NY · P. Yaman, MI

Senior Clinical Consultants (15-19 years):

S. Harlock, MI · R. Anthony, OH · K. Baker, TX · F. Berman, PA · L. Brimhall, MT · M. Briskin, NY · L. Brown, MI · R. Ciccone, MI · C. Colbert, MI · M. Conrad, PA · J. Dingman, WI · J. Doueck, NY · M. Dwoskin, MI · M. Eannaccone, NY · R. Engle, IL · K. Fairbanks, MI · K. Fischer, IN · G. Franco, NY · N. Carlisi, OH · K. Goodman, MI · S. Graber, IL · P. Grandsire, NY · B. Gursky, MI · E. Gutman, NY · K. Hamlett, TX · G. Hart, OH · R. Herwig, KS · J. Kaminski, MI · R. Kaprielian, NJ · M. Kastner, OH · C. Kehr, MI · M. LaMarche, WA · J. Leitner, MI · R. Lezell, MI · M. Livernois, NC · B. Manne, FL · N. Mansour, MI · N. Markarian, CA · J.W. Mikesell, IL · G. Mosso, PA · E. Mosso, PA · E. Odenweller, OH · J. Paris, TX · D. Parris, GA · D. Peterson, MD · T. Pieper, WY · D. Pitak, MI · V. Plaisted, NY · D. Qualliotine, NC · C. Reed, MI · P. Sandvick, WI · K. Schwartz, FL · J. Shea, MO · B. Shumaker, NJ · B. Sims, NY · H. Tetelman, OH · C. Trubschenck, CA · P. Tu, CA · S. Ura, NH · W. Walcott, MI · L. Wee, MI · D. Wojtowicz, MI · M. Zahn, MI

Clinical Consultants (14 years or less):

A. Albright, NY · N. Alexa, MI · G. Alfe, IL · B. Argersinger, NC · P. Arsenault, MA · A. Bagchi, MI · B. Barricklow, OH · L. Bartoszewicz, MI · J. Bechtel, MI · C. Bhatti, MI · L. Bishop, MI · T. Bizga, OH · G. Bloomfield, MI · J. Bostic, OH · C. Brown, LA · W. Brownscombe, MI · E. Brust, MI · S. Bunek, MI · J. Bunek, MI · T. Burns, MI · J. Bush, PA · H. Cadorette, MI · P. Campo, NY · P. Cracchiolo, MI · D. Chacko, TN · P. Chaiken, IL · D. Chenevert, MI · W. Co, MI · M. Connelly, MI · C. Dietz, OH · S. Dillingham, NY · R. Dost, VA · A. Dutko, MI · M. Eford, MI · O. Erdt, MI · F. Facchini, MI · F. Falcao, FL · M. Feinberg, NY · L. Feldman, NJ · M. Frankman, SD · M. Glovis, MI · C. Goldin, MI · M. Grant, MI · B. Greenwood, UT · J. Griffin Jr., MO · P. Gronet, KY · H. Gulati, MA · D. Haas, Ontario · J. Haddad, MI · S. Harden, GA · J. Hastings, CA · D. Hauck, CA · J. Hengehold, MI · B. Herrmann, CA · D. Hock, MI · C. Huang, CA · P. Indianer, MI · J. Ireland, MI · C. Jaghab, MI · J. Jaghab, MI · M. Kachi-George, MI · D. Kapp, NY · J. Karam, MI · E. Kelly, GA · J. Kelly, GA · L. Kemmet, MN · D. Keren, NY · C. Knapp, MI · M. Koczarski, WA · B. Kolb, MI · D. Kuras, MI · C. Latham, OH · R. Le, NC · S. Lever, MD · I. Levine, NY · E. Lowe, BC, CAN · J. Lusby, MI · M. Man, NY · C. Manduzzi, MI · M. Mantzikos, NY · F. Margolis, IL · M. Mason, NY · T. McDonald, GA · C. McLaren, MI · J. McLaren, MI · M. McMullin, MI · H. Menchel, FL · S. Migdal, MI · J. Minsky, CA · R. Mizrahi, NY · M. Moeller, MI · G. Molinari, MI · L. Montes, NY · M. Murphy, MI · J. Nash, MI · A. Nazarian, MI · N. Nealis, IL · J. Olitsky, FL · J. Olsen, MI · F. Orlando, NY · R. Oshrain, NY · A. Overall, MI · S. Owens, MI · M. Paquette, MI · J. Park, IL · J. Parrott, MI · M. Patel, MI · C. Pike, MI · B. Pittsley, MI · T. Poirier, MI · D. Radtke, MI · G. Raichelson, Ontario · G. Ramos, NY · C. Ramsey, FL · T. Reeves, TN · N. Rego, CA · G. Reskakias, NY · J. Riggs, MI · J. Rowe, AR · A. Saddy, MI · L. Seluk, MI · R. Selvan, NJ · M. Shapiro, MI · A. Shemesh, IN · P. Shumaker, MI · B. Silver, MI · S. Simpson, MI · J. Smith, MI · C. Stevens, OK · B. Stevenson, MI · B. Stieper, MI · S. Tamber, MI · G. Tarantola, FL · T. Teel, IN · Lyn. Vandelaar, MI · H. Vann, MS · M. Waranowicz, MI · H. Whitt, MI · L. Williams, MI · K. Wilson, MI · D. Wolf, MA · W. Wright, CA · N. Yeager, MI · H. Yeung, CA · D. Young, MI · P. Zanetti, MI · J. Zanetti, MI · S. Zimmer, MI

Laboratory Consultants:

Apex Dental Milling, MI · Bullinger Dental Lab, MI · Centric Dental Laboratory, TX · Cornerstone Dental Studio, Inc., MI · David's Dental Laboratory, NY · Expertec Dental Lab, MI · Heritage Dental Laboratory, IL · Technique Crown and Bridge, Inc., NC