



**waterpik®**

**SONIC FUSION®:  
CHANGING THE GAME  
IN INTERDENTAL CARE**

## DISCLOSURE STATEMENT

- The content for this self-study course was written by Carol A. Jahn, RDH, MS, an employee of Water Pik, Inc., a subsidiary of Church & Dwight, Co., Inc.
- This course was designed, developed, and produced by Water Pik, Inc., a subsidiary of Church & Dwight, Co., Inc.
- Water Pik, Inc., a subsidiary of Church & Dwight, Co., Inc. manufactures and distributes products addressed in this course.

## COURSE OBJECTIVE

To provide the learner with a review of the challenges of string floss and provide insight and tangible solutions for enhancing the likelihood that a patient will regularly use an alternative interdental aid.

## LEARNING OUTCOMES

- Understand the barriers to string floss use
- Discuss the role of ease and convenience in choosing interdental aids
- List the oral health benefits of the new Sonic-Fusion®
- Instruct patients in the use of Sonic-Fusion®

## INTRODUCTION

Interdental cleaning is imperative to good oral health. Dental professionals routinely and passionately educate patients about the value and importance of flossing. Yet, data consistently finds that people not only do not floss, but they often lie or exaggerate to the dentist and dental hygienist about how often perform this activity.<sup>1</sup> In the UK, 33% of adults admit to never flossing<sup>2</sup>, although the real number is suspected to be much higher.

Barriers to flossing are numerous. One of the most commonly cited factors is that flossing is time-consuming. This can be difficult for dental practitioners to understand. However, few patients possess the same level of manual dexterity as dental professionals. This can lead to struggles such as inability to get the floss through the contact, snapping the floss into gum tissue, and having the floss dig into the flesh of fingers holding the floss. All of these can make the process feel time-consuming and even painful – mentally and physically.

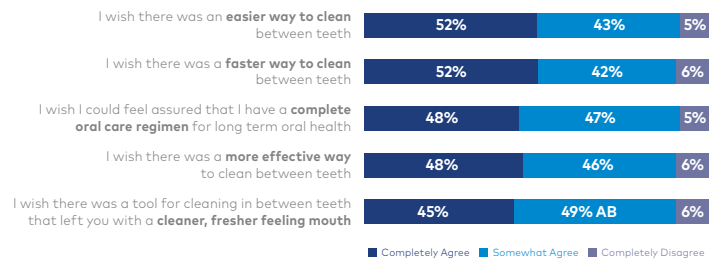
Tedesco et al studied the intentions, actions, and beliefs of toothbrushing and flossing. They found that people had high intentions for toothbrushing and believed it was a healthy, beneficial, and pleasant activity. Subjects indicated they had high confidence in their ability to brush their teeth. The result of this was that people only forgot to brush twice daily in the range of once or twice a week. In comparison, even though subjects

stated that they believed flossing was a healthy and valuable activity, their stated intent to floss was low. They also indicated that their confidence level in using floss was low. This resulted in people 'forgetting' to floss 3, 4 or more times per week.<sup>3</sup>

## WHAT PATIENTS WANT

When patients were surveyed about what they wanted in an oral care device, more than 90% wanted a tool that provided an easier, faster, and more effective way to clean between teeth. Another item on the wish list was an interdental device that left them with a cleaner, fresher mouth. Importantly, they want the assurance that the regimen they choose will provide them with long-term good oral health.<sup>4</sup>

### Consumer Oral Care Routine: Opportunities For Improvement



The survey findings should be no surprise given our fast-paced world. Convenience has emerged as a major factor in consumer activities and purchases. People bank, make travel arrangements, shop for groceries and more from a computer or mobile device. Free shipping and free returns have become the norm not an exception.

Does convenience play a role in patient motivation? Behavior researchers and brothers Chip & Dan Health have found there are three core elements to behavior change; providing clear direction, motivation and determination, and smoothing the path. Of the three, the Health brothers believe that even simple tweaks of the path can lead to some of the most dramatic behavior changes.<sup>5</sup> Consider smoking. People who use tobacco know it is a habit that poses significant health risks. Yet quitting is difficult for many reasons. However, when looking at environmental factors, states that have the lowest smoking rates are those that make smoking more difficult. This includes bans on smoking in workplaces, bars, restaurants and other public places and having higher taxes on tobacco.<sup>6</sup>

It is both natural and easy to think that a lack of compliance is about the patient – not caring, lazy, unmotivated etc. It is far more difficult to focus on external factors as the issue. This is called 'fundamental attribution error'.<sup>5</sup> In the long run, changing the environment is an easier way to change behaviors.<sup>5</sup> Continuing to focus on behavior (like flossing) that a patient has no interest in doing wastes our time and theirs.

## BRIDGING THE GAP



Figure 1: Waterpik® Ultra Professional Water Flosser

There are numerous products on the market today that provide an easier and potentially more effective way to clean between teeth. Interdental brushes (IDB) come in a variety of shapes and sizes and are easy to use and convenient. A 2013 systematic review by Cochrane found some evidence that IDBs may provide a better gingivitis reduction than string floss.<sup>7</sup>

The Water Flosser has been compared to string floss in five studies. **(Figure 1)** In each instance, the Water Flosser was shown to be significantly better at improving oral health over string floss.<sup>8,9,10,11,12</sup> Notably, Rosema et al and Magnusson et al found the Water Flosser was up to twice as effective as string floss at reducing bleeding.<sup>10,12</sup> Regarding the removal of plaque biofilm, a study at the University of Southern California Center for Dental Biofilms found that the Water Flosser's combination of pulsation and pressure produce shear hydraulic forces that removed up to 99.9% of plaque from treated areas.<sup>13</sup>



Figure 2: Waterpik® Sonic-Fusion®

There is a new entry to the self-care market that makes adding flossing to toothbrushing even more convenient. Waterpik® Sonic-Fusion® is a flossing toothbrush that combines the power of a sonic toothbrush with the clinically proven efficacy of Water Flossing. **(Figure 2)** This new tool allows patients to add water flossing to toothbrushing with the simple touch of a button.

The key to the simplicity of Sonic-Fusion® is that it takes a process (toothbrushing) that people rarely forget to do<sup>3</sup> and with the touch of a button on brush handle, they can add one they often neglect (flossing).<sup>3</sup> **(Figure 3)** Having both buttons on the handle allows users to use the product in the way they like best. One button provides sonic brushing. A second button starts the Water Flosser. These can be done separately or by pressing both buttons, the patient can brush and floss simultaneously. Importantly, patients can switch between modes without ever removing the brush from the mouth. The brush head comes with a Water Flossing tip embedded into the handle. **(Figure 4)** The small, compact design of the brush head makes it easy to maneuver and Water Floss.

Waterpik® Sonic-Fusion® provides the same rate of pulsation and pressure settings as a traditional Water Flosser; 1,400 pulses per minute and a pressure range of 10-100 psi. The reservoir provides 60 seconds of water capacity; enough to allow for Water Flossing



Figure 3: Waterpik® Sonic-Fusion® Features



Figure 4: Waterpik® Sonic-Fusion®

of the entire mouth. The sonic toothbrush has 30,000 strokes per minute, a two-minute brushing timer with a 30-second pacer.

## CLINICALLY PROVEN EFFICACY

A recent 4-week study found that the Waterpik® Sonic-Fusion® was twice as effective as string floss for removing plaque and reducing bleeding and gingivitis.<sup>14</sup> **(Figure 5)** At baseline, all

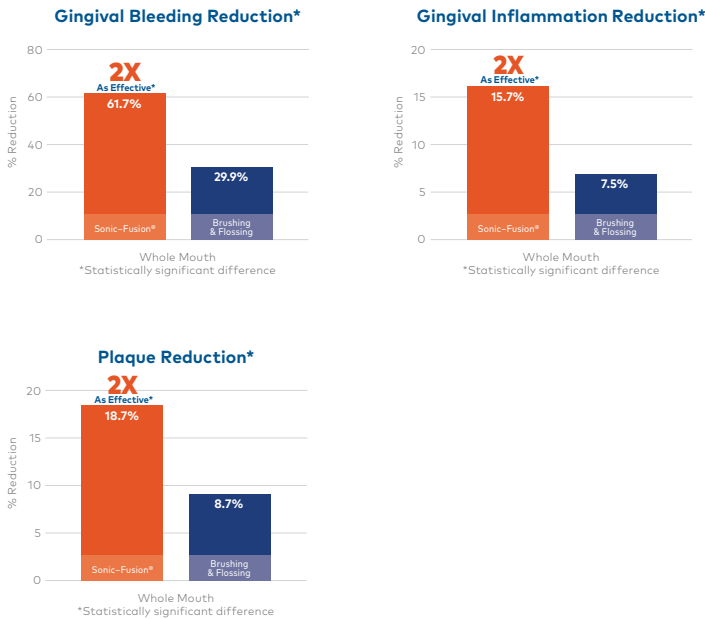


Figure 5: Comparison of a novel sonic toothbrush to standard brushing and flossing on clinical signs of inflammation: A randomized clinical trial



Figure 6: Waterpik® Sonic-Fusion®

subjects received written and verbal instructions and demonstrated proficiency with their assigned device. The recommended usage for Sonic-Fusion® was two minutes of brushing followed by one minute of Water Flossing.<sup>14</sup>

All subjects completed the study, and no adverse events were reported for any subjects. Oral soft-tissues exams were conducted. At the 4-week conclusion of the study, both protocols demonstrated significant reductions in bleeding on probing, gingivitis, and plaque accumulations. The Sonic-Fusion® was significantly more effective at reducing bleeding,

gingivitis, and plaque than manual brushing and flossing. The investigators concluded that the key to the efficacy of Sonic-Fusion® is the water-flossing action and the ability of the device to accomplish these things with a single device.<sup>14</sup>

Waterpik® Sonic-Fusion® has been awarded the ADA Seal of Acceptance. (Figure 6) This means that the product has submitted evidence demonstrating safety and efficacy.<sup>15</sup> For a product to be eligible to earn the Seal, it must demonstrate a significant effect against gingivitis before it can be allowed to make a plaque control claim.<sup>16</sup> "The ADA Council on Scientific Affairs Acceptance of Waterpik® Sonic-Fusion® is based on its finding that the product is

safe and has shown efficacy for removing plaque along the gumline and between teeth and helping to prevent and reduce gingivitis, when used as directed."<sup>15</sup>

## HOW TO USE

With three different modes, helping patients understand how to use Sonic-Fusion® is essential. The sonic toothbrush should be used for two minutes. This can be done before or after using the Water Flossing mode. For those who like to walk around while brushing, the Water Flosser hose can be easily disconnected. Any type of toothpaste can be used with the unit including products that contain baking soda.

To Water Floss, the hose must be connected. Fill the reservoir with warm water. Like using any Water Flosser for the first time, it is advisable to start out at the lowest pressure setting and increase the pressure over time. Most antimicrobial agents can be used in the reservoir. If an agent other than water has been used, fill the reservoir with a modest amount of water and flush the unit. The reservoirs are dishwasher safe and BPA free.

To begin using the Water Flosser mode after brushing simply keep the brush head in the mouth, and activate the floss mode on the brush handle. To use the Water Flosser mode first, place the brush head in the mouth before pushing the floss button. Patients should bend over the sink. Most people prefer to keep their lips slightly open to allow the water to flow out into the sink. Some people like to hold water in their mouth and expel periodically. Both methods are acceptable. Sonic-Fusion® can also be used with the brushing and flossing modes employed at the same time.

[Click here to view 'how to use' video.](#)

## CONCLUSION

The most important goal is helping patients achieve better oral health. Finding products that are clinically effective and both easy and convenient to use can smooth the path and make it more likely that patients will clean between their teeth. The new Waterpik® Sonic-Fusion® meets all of this criteria, and has earned the ADA Seal of Acceptance for safety and efficacy.

## REFERENCES

1. More than a quarter of U.S. adults are dishonest about how often they floss their teeth. Survey conducted by Harris Poll on behalf of the American Academy of Periodontology. June 22, 2017. <https://www.perio.org/consumer/quarter-of-adults-dishonest-with-dentists>
2. Ipsos poll conducted June 27-28, 2017, - 1005 US adults over age 18.
3. Tedesco LA, Keffer MA, Fleck-Kandath C. Self-efficacy, reasoned action, and oral health behavior reports: A social cognitive approach to compliance. *J Behav Med.* 1991; 14(4):341-355.
4. Ipsos, Vantis Study, August 2016.
5. Heath C, Heath D. *Switch: How to Change Things When Change is Hard.* New York: Broadway Books, 2010.
6. Eagan, Sophie. Why smoking rates are at new lows. The New York Times. June 25, 2013. <https://well.blogs.nytimes.com/2013/06/25/why-smoking-rates-are-at-new-lows/>
7. Poklepovic T, Worthington HV, Johnson TM, Sambunjak D et al. Interdental brushing for the prevention and control of periodontal diseases and dental caries in adults. *Cochrane Database of Systematic Reviews* 2013, Issue 12. Art. No.: CD009857. DOI: 10.1002/14651858.CD009857.pub2 <https://www.ncbi.nlm.nih.gov/pubmed/24353078>
8. Barnes CM, Russell CM, Reinhardt RA, Payne JB et al. Comparison of irrigation to floss as an adjunct to tooth brushing: Effect on bleeding, gingivitis and supragingival plaque. *J Clin Dent* 2005; 16: 71–77. <https://www.ncbi.nlm.nih.gov/pubmed/16305005>
9. Sharma NC, Lyle DM, Qaqish JG, Galustians J et al. Effect of a dental water jet with orthodontic tip on plaque and bleeding in adolescent patients with fixed orthodontic appliances. *Am J Orthod Dentofacial Orthop* 2008; 133: 565–571. <https://www.ncbi.nlm.nih.gov/pubmed/18405821>
10. Rosema NAM, Hennequin-Hoenderdos NL, Berchier CE, Slot DE et al. The effect of different interdental cleaning devices on gingival bleeding. *J Int Acad Periodontol* 2011; 13, 2–10. <https://www.ncbi.nlm.nih.gov/pubmed/21387981>
11. Goyal CR, Lyle DM, Qaqish JG, Schuller R. Evaluation of the plaque removal efficacy of a water flosser compared to string floss in adults after a single use. *J Clin Dent* 2013; 24: 37–42. <https://www.ncbi.nlm.nih.gov/pubmed/24282867>
12. Magnuson B, Harsono M, Stark PC, Lyle D et al. Comparison of the effect of two interdental cleaning devices around implants on the reduction of bleeding. A 30-day randomized clinical trial. *Compend of Contin Educ in Dent* 2013; 34(Special Issue 8): 2–7. <https://www.ncbi.nlm.nih.gov/pubmed/24568169>
13. Gorur A, Lyle DM, Schaudinn C, Costerton JW. Biofilm removal with a dental water jet. *Compend Cont Educ Dent* 2009; 30(Special issue 1): 1–6. <https://www.ncbi.nlm.nih.gov/pubmed/19385349>
14. Goyal CR, Qaqish JG, Schuller R, Lyle DM. Comparison of a novel sonic toothbrush to a traditional sonic toothbrush and manual brushing and flossing on plaque, gingival bleeding, and inflammation: A Randomized controlled clinical trial. *Compendium Contin Ed Dent* 2018; 39(2):14-22.
15. American Dental Association. ADA Seal of Acceptance. Waterpik sonic-fusion. Available at: <https://www.ada.org/en/science-research/ada-seal-of-acceptance/ada-seal-products/product-category/product-report?productid=5486&company=Water+Pik%2c+Inc.&category=Powered%20Interdental%20Cleaners>
16. American Dental Association Council on Scientific Affairs. Acceptance Program Requirements: *Toothbrushes*. April 2016.

## POST TEST FOR COURSE #18-28:

### Sonic Fusion: Changing the Game in Interdental Care

Post-Test Questions – you must complete online to receive credit

1. A recent survey found that only \_\_\_% of adults consistently floss every day.
  - a. 6%
  - b. 16%
  - c. 26%
  - d. 66%
2. What factors are important to patients in a interdental device:
  - a. Faster to use
  - b. Easier to use
  - c. More effective
  - d. All of the above
3. Which element of behavior change has been shown to produce the most dramatic behavior changes?
  - a. Providing clear direction
  - b. Motivation
  - c. Determination
  - d. Smoothing and tweaking the path
4. The Flossing mode of Sonic-Fusion® features a pulsation and pressure rate:
  - a. Less than a traditional Water Flosser
  - b. The same as a traditional Water Flosser
  - c. More than a traditional Water Flosser
5. Sonic-Fusion® was found to be 2x as effective as string floss for reducing:
  - a. Plaque
  - b. Gingivitis
  - c. Bleeding
  - d. All of the above
6. For a product to earn the ADA Seal of Acceptance, it must submit evidence showing:
  - a. Safety and efficacy
  - b. Caries reduction
  - c. Ease of use
  - d. Recommended by most dentists

## OBTAINING CPD

### CREDIT: 1 HOUR OF CPD

## TO TAKE THE POST-TEST AND OBTAIN YOUR CPD CERTIFICATE, CLICK ON THE LINK BELOW

[Click on this link to take the post-test and receive your CPD certificate upon passing.](#)

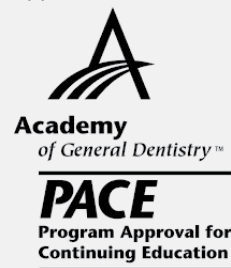
[Click Here](#)

**Scoring:** To receive credit, you must correctly answer 5 out of 6 questions

**Results:** will be immediate upon taking the online test. You will be able to print out your certificate once you successfully pass the posttest.

Questions regarding content or applying for credit?  
Contact: Judith Holtkuile - European Professional Marketing Manager by email:  
[judith.holtkuile@churchdwright.com](mailto:judith.holtkuile@churchdwright.com)

Academy of General Dentistry Approved PACE Program Provider FAGD/MAGD Credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement. The current term of approval extends from 06/01/2018-05/31/2022.



Waterpik®, Waterpik® (stylized), Plaque Seeker®, Pik Pocket®, Nano™ and WaterFlosser® (stylized) are trademarks of Water Pik, Inc.

PN 20026905-STD  
FN 20026905STD-F AA

