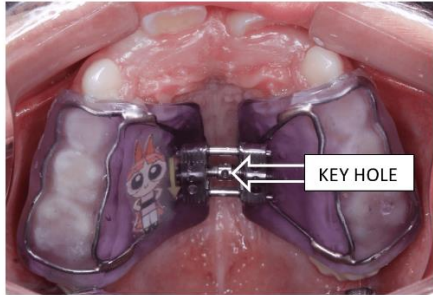


EXPANDER INSTRUCTIONS



Expander – An expander is an orthopedic appliance that is bonded to the upper back teeth. The expander is turned with a special key to separate the 2 halves of the upper jaw bone. The expander will remain bonded in place for 4-6 months. This allows adequate time for new bone to fill into the created space while holding the width we have gained.

Expander Ledge – The “ledge” is the area on the side of the expander where the appliance meets the gum tissue. This can easily be seen if you pull the cheek to the side. This is the most important area to brush thoroughly with an expander in place.

Expander key – The key is placed in the “key hole” in the center part of the expander to “turn” it. Each turn expands the jaw a small increment of ¼ mm. Some patients have 1 screw and some patients have 2 screws.

Turns - The doctor will determine the number of turns needed. Turn the expander once daily unless instructed otherwise. We recommend turning it after school, before playing video games or going outside to play (this way they are not thinking about it).

Front Screw: TURN ONCE A DAY FOR _____ DAYS.

Back Screw: TURN ONCE A DAY FOR _____ DAYS.

Special Instructions:

INSTRUCTIONS FOR TURNING:

- Place the key in the hole closest to the front teeth then push the key down towards the throat until the screw will not turn any further.
- You should be able to see another hole that rotated into the top spot for tomorrow's turn.
- When removing the key, pull it straight out of the hole NOT turning it back again towards the front teeth (doing this can remove the turn you just completed).

The expander can cause discomfort to the teeth and face for 3-5 minutes following turns. Take Tylenol or Fish Oil as needed for pain. Aspirin, Ibuprofen, and other NSAID's can actually inhibit or slow down tooth and jaw movement. If needed, only use Tylenol or NSAID's for a short period of time.

As you do more turns, a space may open between the 2 front teeth. This is normal and not concerning. The space will either close by itself or we will close it during treatment.

A special spring has been added to the back of your expander to help with the eruption and position of your upper six-year molar(s). We will adjust this spring as needed throughout treatment. If the spring falls out, please call our office.

IN YOUR SUPPLY BAG



- **Expander key** – explained above.
- **Wax** - You can expect the cheeks and soft tissue to develop sore spots or ulcers. Use **orthodontic wax** to reduce discomfort. Take a small piece of wax, roll it in a ball, and stick it directly to the expander, wires or tubes to prevent it from rubbing. It may help to dry off the area first. You can apply Orajel or Anbesol on the affected area too. Both can be found at the pharmacy. Warm salt water rinses help with healing as well. The sores will get better in a few days as your cheeks get used to the appliance!
- **Proxabrush** - Use a **proxabrush** to help brush any food or plaque off the expander ledge or under the screw area in addition to using a normal toothbrush and toothpaste. It does not matter if the toothbrush is traditional or electric however; we highly recommend purchasing a Sonicare toothbrush and a Waterpik. The Waterpik is especially helpful for cleaning in the screw area.

YOU MUST BRUSH YOUR TEETH BETTER THAN EVER! Plaque, which is acidic, accumulates along your gumline, expander and teeth. Plaque can cause permanent white spots, cavities and odors. Brush your teeth, expander ledge, tongue and roof of your mouth after each meal, snack and before bed. That is 4-5 times per day! Brushing should take 2 minutes each for upper and lower teeth (4 minutes total). Mouthwashes should be swished for 30-60 seconds before spitting out. Do not rinse with water after using rinses.

Extra care must be taken in the "**danger zone**" located on the expander ledge. Plaque and food collect here. Angle your toothbrush properly so the bristles clean around the ledge and gums. If your gums get puffy or bleed while brushing, gingivitis is present. Don't be discouraged, the bleeding will stop when brushing improves.

We highly recommend the use of Spry Xylitol Products, David's Hydroxyapatite Paste and Oral Probiotics to replenish the "good bacteria" in your mouth. These are available at our front desk. Information sheets on these products are included.

Please follow our detailed Daily oral hygiene routine for expander and braces on the following page.

DIET RESTRICTIONS – Chewing, swallowing and talking may be difficult for a week. There will also be extra saliva in the mouth for a few days. Initially, we recommend eating softer foods cut into TINY pieces until comfortable chewing. You can also carry around a water bottle taking little sips to help with swallowing. Once comfortable, you can incorporate regular foods until back to eating a normal and healthy diet.

In order to prevent breakage and delays in treatment, be mindful of food choices. **AVOID** eating REALLY crunchy foods (ex. nuts, ice, seeds, Jolly Ranchers, etc) or REALLY chewy foods (ex. gum, caramel, taffy, Tootsie Rolls, etc). Limit sugary drinks like pop and energy drinks. These drinks are highly acidic and can loosen the bond between the expander and the teeth.

BREAKAGE (NON-EMERGENCIES)

On occasion, an expander will become "un-glued" from the back teeth. We recommend that parents check for this a few times per week by gently pulling down on the expander ledges on both sides. The expander should NOT move off of the teeth. If it does, simply push it back up on the teeth, **STOP ALL TURNS**, and call the office. We schedule an appointment to address.

**** If you are in pain and it cannot wait until the next working morning, emergency numbers are available on our answering machine.**

OVERVIEW OF ORAL HYGIENE DURING ORTHODONTIC TREATMENT

Proper oral hygiene throughout orthodontic treatment is necessary to achieve excellent results and prevent cavities, gum problems and white spots from developing. These habits will also help restore the proper oral microbiome that provides oral and systemic health benefits. These habits developed throughout your orthodontic treatment combined with instructions from your family dentist and dental hygienist will provide lifetime protection of your teeth and gums. Proper oral hygiene is more than just proper brushing and flossing. Healthy teeth and gums also include accumulating and feeding the “good” bacteria in your mouth that prevent cavities and gingivitis, killing off the bad bacteria in your mouth that cause decay, bleeding gums and bad breath and providing the proper minerals to encourage remineralization of your teeth.

Our five pillars of proper oral hygiene include: brushing, flossing, xylitol, hydroxyapatite and oral probiotics.

Brushing: Proper oral hygiene starts with brushing. The teeth must be brushed after every meal and before bed. Removing food, plaque and acid before damage occurs is critical. When brushing, use proper pressure and angles making sure bristles extend under the gums and wires. Brush all sides of the brackets as well as the gums, tongue and roof of the mouth. Be especially thorough around any elastic chains, power threads and hard to clean areas. Take your time and double check in the mirror until there is no visible food or plaque. Brushing should take 2 minutes each for upper and lower teeth (4 minutes total).

- **Proxabrush-** a Proxabrush is a brushing aid that helps clean food debris from between the braces. When you are on the go, use the Proxabrush to quickly brush any food out from your braces until you are able to brush with a normal toothbrush and toothpaste.
- **Sonicare Electric Toothbrush-** Dr. Spokane and Dr. Karski recommend a Sonicare Power toothbrush. Please see our information sheet and video regarding the advantages of the Sonicare.

Flossing: Proper flossing is critical to avoiding cavities and gum inflammation especially between the teeth. If bleeding occurs when brushing or flossing, active gingivitis is already present! Do not be afraid of the bleeding! It will disappear when hygiene improves. Gingivitis is reversible with good brushing and flossing. The bleeding is your body’s attempt to “push out the bad bacteria”.

- **Waterpik Water Flosser-** Dr. Spokane and Dr. Karski recommend the Waterpik water flosser to remove food, plaque and debris from in between the teeth and around the braces. Water flossing has advantages over traditional flossing in many areas but is not a substitute for regular flossing.
- **Flossing-** The main advantage of traditional flossing is removing plaque at the contact area between the teeth. Water flossing is fantastic at removing food and plaque immediately above and below the contact area but not where the teeth actually touch.
- **Platypus Orthodontic Flossers-** offer an alternative to traditional floss for those on-the-go or who have dexterity issues with traditional flossing.

Xylitol: Xylitol prevents tooth decay, gingivitis and plaque formation. We recommend xylitol toothpaste, rinses, mints and nasal sprays.

Hydroxyapatite: Hydroxyapatite prevents demineralization and encourages remineralization. Hydroxyapatite pastes directly deposit calcium and phosphorous on the enamel surface.

Oral Probiotics: Oral probiotics replenish the good bacteria teeth and gums need to thrive.

We highly recommend the use of Spry Xylitol Products, David’s Hydroxyapatite Paste and Oral Probiotics to replenish the “good bacteria” in your mouth. These are available at our front desk. Information sheets on these products are included.

Please follow our detailed Daily Oral Hygiene Routine for Braces on the following page.

Sonicare Power Toothbrush

A sonic toothbrush offers several advantages including superior plaque removal, gentler cleaning on sensitive teeth and gums, improved reach into hard-to-access areas, potential for whiter teeth, better gum health, and a more comprehensive clean compared to a manual toothbrush due to its high-frequency vibrations that break down plaque more effectively; it is particularly beneficial for people with braces.

Key benefits of a sonic toothbrush:

Superior plaque removal:

Sonic vibrations can disrupt and remove plaque more effectively than a standard toothbrush, leading to cleaner teeth and healthier gums.

Gentle cleaning:

Despite the powerful vibrations, sonic toothbrushes are often designed to be gentle on sensitive teeth and gums.

Improved access:

The vibrations can reach into tight spaces and along the gumline, cleaning areas that might be missed with a manual brush.

Potential for whiter teeth:

By thoroughly removing plaque, a sonic toothbrush can contribute to a brighter smile.

Suitable for special needs:

People with braces, dental implants, or gum disease may benefit from the cleaning power of a sonic toothbrush.

Built-in timers:

Sonic toothbrushes have timers to ensure you brush for the recommended duration.

May stimulate saliva production:

The vibrations can help stimulate saliva flow, which is beneficial for people with dry mouth.

Please click on the links below or scan the QR Codes to watch Sonicare at work!!

https://bit.ly/spokanekarskiortho_sonicare

https://bit.ly/spokanekarskiortho_mrksonicare



Overview



Spokane & Karski Educational Video

Waterpik Water Flosser

Waterpik water flossers can have many benefits, including:

Removing plaque

Water flossers can remove up to 99.9% of plaque bacteria that causes cavities, gingivitis, and bad breath.

Improving gum health

Water flossers can help reverse gingivitis and reduce inflammation and bleeding.

Cleaning around braces

Water flossers are to 3-5 times more effective than brushing and floss for removing plaque around braces.

Cleaning implants and bridges

Water flossers are best for cleaning bonded orthodontic appliances, space maintainers, implants and bridges.

Reaching deep into gum pockets

Water flossers can navigate deep within gum pockets, which is important for people with periodontal disease.

Easy to use

Water flossers are easy to use and don't have the risk of cutting your gums like floss can.

Different tips for different needs

Waterpik offers different tips for different needs, such as the orthodontic tip for use with braces.

The orthodontic tip is designed to remove plaque and food from around brackets and wires, under the gums and on the ledges of bonded expander.

Deeper cleaning than traditional floss

The jet of water from a water flosser can reach into tissue pockets where bacteria can hide.

To use a water flosser, you can:

1. Turn on the water flosser and lean over the sink.
2. Place the tip in your mouth with your lips partially closed to prevent splashing.
3. Aim the tip at the gum line.
4. Start with your back teeth and move along the gum line, pausing briefly between teeth.
5. Floss the front and back of your teeth for one minute a day

Please click on the link below or scan the QR Code to watch Waterpik at work!!

https://bit.ly/spokanekarskiortho_waterpik

https://bit.ly/spokanekarskiortho_mrkwaterpik



Overview

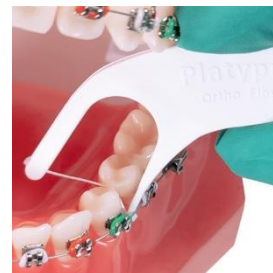
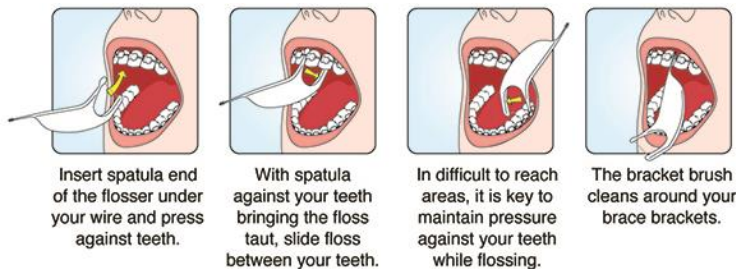


Spokane & Karski Educational Video

Platypus Orthodontic Flossers

Platypus Orthodontic Flossers have several advantages, including:

- **Easy to use:** The spatula or round end fits under the arch wire, allowing you to floss between brackets without threading. The wider or square end goes on the inside of your teeth.
- **Quick:** You can floss your entire mouth in less than two minutes.
- **Safe:** The patented structure is designed to floss correctly without damaging brackets or wires.
- **Effective:** The pick end can remove plaque and food particles around brackets.
- **Recommended by professionals:** Orthodontists, dentists, and hygienists recommend Platypus flossers.
- **Improves flossing habits:** Some say Platypus flossers make flossing 21 times more likely than traditional methods.
- **Adjustable:** if the round end does not fit between the brackets, you can clip with a fingernail clipper to narrow.



Please click on the link below or scan the QR Code to watch Platypus Flossers at work!!

https://bit.ly/spokanekarskiortho_platypusflosser



Overview



Spokane & Karski Educational Video

Xylitol

Xylitol is a sugar substitute that is found naturally in many plants, fruits and vegetables. We even produce xylitol via normal metabolism. Xylitol is from plant fibers called xylan- hence its name. It is a sugar alcohol that is similar to sugar but has fewer calories. A sugar alcohol is different from alcohol that can make you drunk so xylitol is safe for people with alcohol addictions. Xylitol does not raise blood sugar or insulin levels. For people with diabetes, prediabetes, obesity or other metabolic problems, xylitol is an excellent alternative to sugar.

Xylitol is used in many products including sugar-free gums, mints, candies and nasal sprays. It is also used in toothpastes and mouthwashes. Xylitol also has other non-dental uses such as: baked goods, cough syrups, chewable vitamins and certain medications. Xylitol positively influences the gut microbiome (good versus bad bacteria), improves bone health, and reduces the risk of respiratory, ear and yeast infections.

Xylitol has many dental and oral benefits. Xylitol prevents tooth decay, gingivitis and plaque formation:

1. Kills the bad bacteria in the mouth
2. Improves the pH of the mouth
3. Prevents the bad bacteria from sticking to the tooth surface.
4. Acts as a prebiotic or food source for the good bacteria in your mouth.
5. Stimulates saliva flow and enamel remineralization
6. Counteracts the oral drying effects of mouth breathing.
7. Inhibits the proliferation of oral cancer cells.

Keep in mind that your mouth, nose and ears are all connected so using xylitol in the mouth can prevent these bad bacteria from growing in the throat, nose or ears. Xylitol is also available in a nasal spray called Xlear.

Xlear xylitol nasal spray has the following health benefits:

1. Moisturize, sooth and cleanse nasal passages
2. Decrease nasal swelling and allergy symptoms
3. Reduce the adhesion of contaminants to nasal tissue.
4. Helps to prevent recurrent acute otitis media (ear infections) in children.
5. Reduce the time to test negative after a COVID-19 infection by 50%.
6. Improve airflow by thinning and loosening mucus secretions.

For all of these reasons, oral and nasal xylitol products are highly recommended during your orthodontic treatment where proper oral hygiene is a bit more challenging and even more important to achieve.

We recommend Spry xylitol oral products and keep several in the office for convenience:

1. **Spry fluoride free toothpaste.**
2. **Spry mouth wash**
3. **Spry tooth gel**
4. **Spry mints**
5. **Xlear nasal spray**

*** Please do not allow dogs to eat xylitol products. Xylitol is toxic to dogs. ***

Please click on the link below or scan the QR Code to learn more about xylitol.

https://bit.ly/spokanekarskiortho_dcsxylitol



Spokane & Karski Educational Video

Dental Enamel Remineralization: Fluoride vs. Hydroxyapatite

All of our patients are familiar with fluoride and its use in toothpaste, mouth rinses and drinking water. Fluoride has been used in dentistry for decades. Dentists have recommended fluoride as being very effective at preventing tooth decay. Recently, hydroxyapatite has been used and researched as an alternative to fluoride. Hydroxyapatite is promoted as a more natural alternative to fluoride with less side effects.

What is Fluoride?

Fluoride is a mineral that occurs naturally in water, soil, rocks, and some foods. It is used by the dentist and at home to prevent tooth decay. Dentists use fluoride in gels, foams, varnishes, pastes, rinses and other dental materials. The primary benefits of fluoride are topical as they are applied directly to the tooth enamel.

Fluoride works by replacing minerals (calcium and phosphorous) that are lost due to acid attack from plaque, bacteria and sugars. This process is called demineralization and occurs more frequently in patients with poor oral hygiene. When fluoride incorporates into the enamel (remineralization), it is called fluorapatite.

Fluoride is effective at killing harmful bacteria, but it also kills good bacteria, which can disrupt the oral microbiome (good versus bad bacteria) and potentially lead to antimicrobial resistance or systemic health problems. Overuse or excessive swallowing of fluoride products can also lead to fluorosis which causes the teeth to discolor. Studies also link excessive fluoride exposure to potential neurotoxicity, thyroid dysfunction, and conditions like skeletal fluorosis.

What Is Hydroxyapatite?

Hydroxyapatite is a naturally occurring mineral that makes up a large portion of the bones and teeth in the human body. Over 90% of enamel and over 60% of our bones are already made up of hydroxyapatite.

Hydroxyapatite also prevents demineralization and encourages remineralization. Hydroxyapatite pastes directly deposit calcium and phosphorous on the enamel surface. The hydroxyapatite (nano-hydroxyapatite) fills in the microscopic gaps and scratches and integrates into the existing enamel.

Hydroxyapatite does not kill bacteria like fluoride does so disruption of the oral microbiome does not occur. Hydroxyapatite does, however, prevent bacteria from adhering to the enamel surface.

Hydroxyapatite, like fluoride, helps to reduce enamel sensitivity. Hydroxyapatite is also a natural tooth whitener unlike fluoride which can lead to dental fluorosis and discoloration if used in excess. Accidentally swallowing hydroxyapatite is not harmful. The minerals will dissolve in the stomach acid.

For patients seeking a more natural product, hydroxyapatite may be more appealing than fluoride especially if you have concerns about overexposure to fluoride and are interested in a product that can help repair enamel, reduce tooth sensitivity, and has whitening properties.

Whether you stick with fluoride or opt for hydroxyapatite, the key is to maintain consistent oral hygiene practices, including brushing your teeth at least twice daily, using proper rinses, flossing consistently, and visiting your dentist regularly.

We recommend David's Natural Nano Hydroxyapatite toothpaste and keep it in the office for convenience.

Please click on the links below or scan the QR Codes to learn more about Hydroxyapatite

https://bit.ly/spokanekarskiortho_HA

https://bit.ly/spokanekarskiortho_dcsha



Overview



Spokane & Karski Educational Video

ProBiora oral probiotics

Probiotics Aren't Just for the Gut Anymore!

Introducing a whole new way to care for your mouth. Oral probiotics bring your oral biome into balance addressing the root cause of many common teeth and gum issues.

It is critical to maintain or establish a healthy oral microbiome (good bacteria versus bad bacteria) by eating plenty of fruits, vegetables and other probiotic foods regularly, limiting sugary drinks and processed foods and avoiding smoking or excessive alcohol use. Replenishing the good bacteria is critical.

Brushing and flossing often are not enough: It's a common, frustrating problem. You brush and floss, but your breath is still not so great, gingival (gum) inflammation is still present and your gums still bleed when flossing.

Oral probiotics is a simple, all-natural addition to your nightly oral-care routine.

The addition of oral probiotics to your nighttime routine replenishes the good bacteria teeth and gums need to thrive. Diet, stress, medications, illness, and other factors deplete the natural balance of beneficial bacteria in the mouth, allowing the bad, harmful bacteria to take over. This can cause a wide range of oral health issues including: bad breath, discolored teeth, cavities, bleeding gums, inflammation, gingivitis, periodontitis (serious gum infection), and more.

Oral probiotics provide an easy, all-natural way to help proactively maintain your gum and teeth health and enjoy a 'fresh from the dentist' feel when added to your daily oral care routine.

After you complete your nighttime oral hygiene routine and immediately prior to going to bed, chew and swish the tablet for 30 seconds or simply let the tablet dissolve on your tongue to allow for the probiotics to get to work.

Please click on the link below or scan the QR Code to learn more about oral probiotics.

https://bit.ly/spokanekarskiortho_probiora



Daily Oral Hygiene Routine- Expander and Braces

Morning- after eating breakfast

Brush with Spry fluoride free toothpaste
Rinse with Spry mouthwash

Lunch- after eating lunch

Brush with Spry fluoride free toothpaste
Use Platypus Orthodontic flossers if needed to remove visible food particles

After school or work snack

Brush with Spry fluoride free toothpaste
Rinse with Spry mouthwash
Use Platypus Orthodontic flossers if needed to remove visible food particles

After Dinner

Brush with Spry fluoride free toothpaste
Use Platypus Orthodontics flossers if needed to remove visible food particles

Night

Use Water Pik water flosser first to remove all debris and visible plaque around the braces and expander.
Floss with dental floss to remove any plaque at the contact points of the teeth that the Water Pik cannot reach.
Rinse with Spry xylitol mouth wash- spit but do not rinse with water.
Brush with David's hydroxyapatite toothpaste. Spit but do not rinse with water

Immediately before bed- BONUS

ProBiora oral probiotic tablet. Chew and swish the tablet for 30 seconds or simply let the tablet dissolve on your tongue to allow for the probiotics to get to work.

Reminder throughout the day: Chew 1 or 2 Spry xylitol mints keeping the mint/saliva mix in your mouth and swishing for a minute. Do this a few times in the morning, afternoon and evening.

Bonus:

Xlear xylitol nasal spray- spray 2 sprays per nostril every morning and night after oral routine.
More often if symptomatic.